



SEQUENCE LISTING

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Rommens, Johanna M
Fraser, Paul E

<120> GENETIC SEQUENCES AND PROTEINS RELATED TO ALZHEIMER'S DISEASE

<130> 1034/1F808US7

<140> US 09/689,159

<141> 2000-10-12

<150> US 08/509,359

<151> 1995-07-31

<160> 185

<170> PatentIn version 3.1

<210> 1

<211> 2791

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(2791)

<223> where n may be either a or g or c or t/u, unknown or other

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 <213> Homo sapiens

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 35 40 45

Pro Leu Ser Asn Gly Arg Pro Gln Gly Asn Ser Arg Gln Val Val Glu
 50 55 60

Gln Asp Glu Glu Glu Asp Glu Glu Leu Thr Leu Lys Tyr Gly Ala Lys
 65 70 75 80

His Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val
 85 90 95

Val Ala Thr Ile Lys Ser Val Ser Phe Tyr Thr Arg Lys Asp Gly Gln
 100 105 110

Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr Glu Thr Val Gly Gln Arg
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Val Met Thr Ile Leu Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys

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Asp	Leu	Val	Ala	Val	Leu	Cys	Pro	Lys	Gly	Pro	Leu	Arg	Met	Leu	Val
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Ser	Glu	Glu	Trp	Glu	Ala	Gln	Arg	Asp	Ser	His	Leu	Gly	Pro	His	Arg
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Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala Ser Ala Thr Ala
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Ser Gly Asp Trp Asn Thr Thr Ile Ala Cys Phe Val Ala Ile Leu Ile
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Gly Leu Cys Leu Thr Leu Leu Leu Leu Ala Ile Phe Lys Lys Ala Leu
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Pro Ala Leu Pro Ile Ser Ile Thr Phe Gly Leu Val Phe Tyr Phe Ala
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Thr Asp Tyr Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln
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Phe Tyr Ile
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<223> where n may be either a or g or c or t/u, unknown or other

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Gln Glu Arg Gln Gln Gln His Asp Arg Gln Arg Leu Asp Asn Pro Glu
35 40 45

Pro Ile Ser Asn Gly Arg Pro Gln Ser Asn Ser Arg Gln Val Val Glu
50 55 60

Gln Asp Glu Glu Glu Asp Glu Glu Leu Thr Leu Lys Tyr Gly Ala Lys
65 70 75 80

His Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val
85 90 95

Val Ala Thr Ile Lys Ser Val Ser Phe Tyr Thr Arg Lys Asp Gly Gln
100 105 110

Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr Glu Thr Val Gly Gln Arg
115 120 125

Ala Leu His Ser Ile Leu Asn Ala Ala Ile Met Ile Ser Val Ile Val
130 135 140

Ile Met Thr Ile Leu Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys
145 150 155 160

Val Ile His Ala Trp Leu Ile Ile Ser Ser Leu Leu Leu Leu Phe Phe
165 170 175

Phe Ser Phe Ile Tyr Leu Gly Glu Val Phe Lys Thr Tyr Asn Val Xaa
180 185 190

Val Asp Tyr Val Thr Val Ala Leu Leu Ile Trp Asn Trp Gly Val Val
195 200 205

Gly Met Ile Ala Ile His Trp Lys Gly Pro Leu Arg Leu Gln Gln Ala

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Glu Thr Ala Gln Glu Arg Asn Glu Thr Leu Phe Pro Ala Leu Ile Tyr		
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Ser Ser Thr Met Val Trp Leu Val Asn Met Ala Glu Gly Asp Pro Glu		
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Ala Gln Arg Arg Val Pro Lys Asn Pro Lys Tyr Asn Thr Gln Arg Ala		
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Glu Arg Glu Thr Gln Asp Ser Gly Ser Gly Asn Asp Asp Gly Gly Phe		
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Ser Gly Asp Trp Asn Thr Thr Ile Ala Cys Xaa Val Ala Ile Leu Ile		
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Gly Leu Cys Leu Xaa Leu Leu Leu Leu Ala Ile Tyr Lys Lys Gly Xaa		
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Pro Ala Xaa Pro Ile Ser Ile Thr Phe Gly Phe Val Phe Xaa Phe Ala		
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Phe Tyr Ile
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<213> Homo sapiens

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aattgagagt gttacagtct aattctatat cacatgtaac ttttatttgg atatatcagt 120
aatagtgctt tttttttttt tttttttttt tttttttttt tttggggana gagtctcgct 180
ctgtcgccag gttggagtgc aatgggtgca tcttgggtca ctgaaagctc caccncccg 240
gttcaagtga ttctcctgcc tcagccnccc aagtagntgg gactacaggg gtgcgccacc 300
acgcctggga taattttggg ntttttagta gagatggcgt ttcaccanct tggngcaggc 360
tggtcttgga actcctgana tcatgatctg cctgccttag cctccccaaa gtgctgggat 420
tncaggggtg agccactgtt cctgggcctc 450

<210> 8
<211> 516
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(516)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 8
gctcatcatg cttcacgggg gaggtgtgc gggaagaatg ctccacaca gnataaagaa 60
tgctcccga caggatagag aatgcccccg cacagcatag agaagcccc gcacagcata 120
gagaatgccc ccncacagca tagagaagcc cccgcacagc atagagaatg ctcttcacct 180
ctgggttttt aaccagccaa actaaaatca cagaggscma cacatcattt aagatagaaa 240
tttctgtatc ttttaattty tttcmaagta gttttactta ttttcagatt ctatttcttt 300
actagaatta agggataaaa taacaatgtg tgcataatga accctatgaa acmaacmmaa 360
gctagggttt tttcatagst cttcttccag attgaatgaa cgtctgttct aaaatttaac 420
ccccaggga aatattcagt taactatgtt aaaaaccag acttgtgatt gagttttgcc 480

tgaaaatgct ttcataatta tgtgtgaatg tgtgtc

516

<210> 9

<211> 1726

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(1726)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 9

ggatccctcc cctttttaga ccatacaagg taacttcgga acgttgccat ggcatctgta	60
aactgtcatg gtgttgccgg ggagtgtctt ttagcatgct aatgtattat aattagcgta	120
tagtgagcag tgaggataac cagaggtcac tctcctcacc atcttggttt tgggtgggttt	180
tggccagctt ctttattgca accagtttta tcagcaagat ctttatgagc tgtatcttgt	240
gctgacttcc tatctcatcc cgnaactaag agtacctaac ctctgcaaa ttgmagncca	300
gnaggctctg gncttatttn acccagcccc tattcaarat agagtngytc ttggnccaaa	360
cgccyctgac acaaggattt taaagtctta ttaattaagg taagatagkt ccttgsatat	420
gtggtctgaa atcacagaaa gctgaatttg gaaaaagggtg cttggasctg cagccagtaa	480
acaagttttc atgcagggtg cagtatttaa ggtacatctc aaaggataag tacaattgtg	540
tatgttggga tgaacagaga gaatggagca anccaagacc caggtaaaag agaggacctg	600
aatgccttca gtgaacaatg atagataatc tagactttta aactgcatac ttctgtaca	660
ttgttttttc ttgcttcagg tttttagaac tcatagtgac ggggtctgtt ttaatcccag	720
gtctaaccgt taccttgatt ctgctgagaa tctgatttac tgaaaatgtt tttcttgtgc	780
ttatagaatg acaatagaga acggcaggag cacaacgaca gacggagcct tggccaccct	840
ganccattat ctaatggacg acccagggtg actcccggca ggtggtggan caagatgagg	900
aagaagatga gganctgaca ttgaaatatg ncgscaagca tgtgatcatg ctctttgkcc	960
ctgtgactct ctgcatggtg gtggtcgtgg ntaccattaa gtcagtcagc ttttataccc	1020
ggaaggatgg gcagctgtac gtatgagttt kgttttatta ttctcaaasc cagtgtggct	1080
tttctttaca gcatgtcatc atcaccttga aggcctctnc attgaagggg catgacttag	1140
ctggagagcc catcctctgt gatggtcagg agcagttgag agancgaggg gttattactt	1200
catgttttaa gtggagaaaa ggaacactgc agaagtatgt ttctgtatg gtattactgg	1260

atagggctga agttatgctg aattgaacac ataaattctt ttccacctca gggncattgg	1320
gcgcccattg ntcttctgcc tagaatattc tttcctttnc tnacttkggn ggattaaatt	1380
cctgtcatcc ccctcctctt ggtgttatat ataaagtntt ggtgccgcaa aagaagtagc	1440
actcgaatat aaaattttcc ttttaattct cagcaaggna agttacttct atatagaagg	1500
gtgcaccnt acagatggaa caatggcaag cgcacatttg ggacaaggga ggggaaagg	1560
ttcttatccc tgacacacgt ggtccnct gntgtgtnt nccccactg antagggtta	1620
gactggacag gcttaaacta attccaattg gntaatttaa agagaatnat ggggtgaatg	1680
ctttgggagg agtcaaggaa gaggagtag naggttaactt gaatga	1726

<210> 10
 <211> 1883
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(1883)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 10	
cncgtataaa agaccaacat tgccancnac aaccacaggc aagatcttct cctaccttcc	60
cccnnggtgt aataccaagt attcnccaat ttgtgataaa ctttcattgg aaagtgacca	120
ccctccttgg ttaatacatt gtctgtgcct gctttcacac tacagtagca cagttgagtg	180
tttgccctgg agaccatatg acccatagag cttaaaatat tcagtctggc tttttacaga	240
gatgtttctg actttgttaa tagaaaatca acccaactgg tttaaataat gcacatactt	300
tctctctcat agagtagtgc agaggtagnc agtccagatt agtasggtgg cttcacgttc	360
atccaaggac tcaatctcct tctttcttct ttagcttcta acctctagct tacttcaggg	420
tccaggctgg agccctascc ttcatttctg acagtaggaa ggagtagggg agaaaagaac	480
ataggacatg tcagcagaat tctctcctta gaagttccat acacaacaca tctccctaga	540
agtcattgcc cttacttggt ctcatagcca tcctaaatat aaggagtgca gaagtaaagt	600
ctkkntggct gggaaatttg gcacctggaa taaaaatgtt tttctgtgaa tgagaaacaa	660
ggggaagatg gatatgtgac attatcttaa gacaactcca gttgcaatta ctctgcagat	720
gagaggcact aattataagc catattacct ttcttctgac aaccacttgt cagcccnctg	780
ggtttctgtg gcagaatctg gttcyatamc aagttcctaa taanctgtas ccnaaaaaat	840

ttgatgaggt attataatta tttcaatata aagcaccac tagatggagc cagtgtctgc	900
ttcacatggt aagtccttct ttccatatgt tagacatttt ctttgaagca attttagagt	960
gtagctgttt ttctcaggtt aaaaattctt agctaggatt ggtgagttgg ggaaaagtga	1020
cttataagat ncgaattgaa ttaagaaaaa gaaaattctg tgttggaggt ggtaatgtgg	1080
ktggtgatct ycattaacac tganctaggg ctttkgkgtt tgktttattg tagaatctat	1140
acccattca nagaagatac cgagactgtg ggccagagag ccctgcactc aattctgaat	1200
gctgccatca tgatcagngt cattgtwgtc atgactannc tcctgggtgg tchwgtataaa	1260
tacaggtgct ataaggtgag catgagacac agatctttgn tttccaccct gttcttctta	1320
tggttgggta ttcttgtcac agtaacttaa ctgatctagg aaagaaaaaa tgttttgtct	1380
tctagagata agttaatttt tagttttctt cctcctcact gtggaacatt caaaaaatac	1440
aaaaaggaag ccaggtgcat gtgtaatgcc aggctcagag gctgaggcag gaggatcgct	1500
tgggccagag agttcacaag cagcttgggc aacgtagcaa gaccctgcct ctattaaaga	1560
aaacaaaaaa caaatattgg aagtatttta tatgcatgga atctatatgt catgaaaaaa	1620
ttagtgtaaa atatatatat tatgattagn tatcaagatt tagtgataat ttatgttatt	1680
ttgggatttc aatgcctttt taggccattg tctcaamaaa taaaagcaga aaacaaaaaa	1740
agttgtaact gaaaaataaa catttccata taatagcaca atctaagtgg gtttttgntt	1800
gtttgtttgn ttgttgaagc agggccttgc cctnycacc aggntggagt gaagtgcagt	1860
ggcacgattt tggctcactg cag	1883

<210> 11
 <211> 823
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(823)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 11	
caggagtgga ctaggtaaata gnaagntgtt ttaaagagag atngngncng ggacatagtg	60
gtacacanct gtaatgctca nactkatgg ggagtactga agngngnsgg atcacttgng	120
ggtcnggaat ntgagancag cctgggcaan atggcgaaac cctgtctcta ctaaaaatag	180
ccanaawnwa gcctagcgtg gtggcgcrca cgcgtgggtc cacctactca ggaggcntaa	240

gcacgagnan tncctgaacc caggaggcag aggntgtggt garctgagat cgtgccactg	300
cactccagtc tgggcgacma agtgagaccc tgtctccnnn aagaaaaaaaa aaatctgtac	360
tttttaagggt ttgtgggacc tgtaattat attgaaatgc ttctyttcta ggcatccat	420
gcctggctta ttatatcatc tctattgttg ctgctctttt ttacattcat ttacttgggg	480
taagttgtga aatttgggggt ctgtctttca gaattaacta cctnngtgct gtgtagctat	540
catttaaagc catgtacttt gntgatgaat tactctgaag ttttaattgt ntccacatat	600
aggtcatact tggatatataa aagactagnc agtattacta attgagacat tcttctgtng	660
ctcctngctt ataataagta gaactgaaag naacttaaga ctacagttaa ttctaagcct	720
ttggggaagg attatatagc cttctagtag gaagtcttgt gcnatcagaa tgttntaaa	780
gaaaggtnt caaggaatng tataaanacc aaaaataatt gat	823

<210> 12
 <211> 736
 <212> DNA
 <213> Homo sapiens

<400> 12	
gtctttccca tcttctccac agagtttgtg ccttacatta ttactccttg ccattttcaa	60
gaaagcattg tcagctcttc caatctccat cacctttggg ctgttttct actttgccac	120
agattatctt gtacagcctt ttatggacca attagcattc catcaatttt atatctagca	180
tatttgcggt tagaatccca tggatgttct ttctttgact ataacaaaat ctggggagga	240
caaaggtgat ttctgtgtc cacatctaac aaatcaagat ccccggtgg acttttggag	300
gttctttcca agtcttctg accaccttgc actattggac tttggaagga ggtgcctata	360
gaaaacgatt ttgaacatac ttcacgcag tggactgtgt cctcggtgca gaaactacca	420
gatttgaggg acgaggtcaa ggagatatga taggcccgga agttgctgtg ccccatcagc	480
agcttgacgc gtggtcacag gacgattttc actgacactg cgaactctca ggactaccgt	540
taccaagagg ttaggtgaag tggtttaaac caaacggaac tcttcatctt aaactacacg	600
ttgaaaatca acccaataat tctgtattaa ctgaattctg aacttttcag gaggtactgt	660
gaggaagagc aggcaccacc agcagaatgg ggaatggaga ggtgggcagg ggttccagct	720
tccctttgat tttttg	736

<210> 13
 <211> 893

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(893)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 13
ggatccgccc gccttggcct cccaaagtgc tgggattaca ggcattgagcc accgctcctg 60
gctgagtcctg cgatttcttg ccagctctac ccagtttgtt catcttaagc aagtcactga 120
acttctctgg attcccttct cctnnwgtaa aataagnatg ttatctgncc nncctgcctt 180
gggcattgtg ataaggataa gatgacatta tagaatntng caaaattaaa agcgctagac 240
aaatgatttt atgaaaatat aaagattagn ttgagtttgg gccagcatag aaaaaggaat 300
gttgagaaca ttccnttaag gattactcaa gcyccctttt tgstgknwaa tcaganngtc 360
atnnamntat cntntgtggg ytgaaaatgt ttggttgtct caggcggttc ctacttattg 420
ctaaagagtc ctaccttgag cttatagtaa atttgtcagt tagttgaaag tcgtgacaaa 480
ttaatacatt cctgggtttac aaattggtct tataagtatt tgattggtnt aaatgnattt 540
actaggattt aactaacaat ggatgacctg gtgaaatcct atttcagacc taatctggga 600
gcctgcaagt gacaacagcc tttgcggtcc ttagacagct tggcctggag gagaacacat 660
gaaagaaagg tttgtttctg cttaatgtaa tctatggaag tgttttttat aacagtataa 720
ttgtagtga caaagtcttg tttttctttc ccttttcaga acctcaagag gctttgtttt 780
ctgtgaaaca gtatttctat acagtntgtt ccaantgnac agagttacct gcacnncgtt 840
gtccttactt ccagaatgca cagatgtctg aggacaacca cctgagcaat act 893

<210> 14
<211> 475
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(475)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 14
tcagaaaata ctttngggca catgagaatc acatgagaac aagctgatgc ataattcctc 60
ctgtgatgga atgtaatagt aatttaacag tgtcctttct ttttaactgc ctcaaggata 120

cagcaaaata aaacaaaagc aatatgaagg ctgagaatag gtatcagatt atcataaaaa	180
gtatagatca aaaggaatct ggtkctnagg ttggcgagc agcctctaga agcgacnagg	240
gagactttta gaactacat tctcctctat aagtggatcc nangcccagg raaacttgat	300
attgagnaca atggccttac tgaaataacc tgtgatccac tcggnctcat catctccacc	360
accaccataa atttgatgag tncctataat attccancca gnggaaatac ctggraggtt	420
actgaaaggc nacnatcaga cnaaaataaa gnataccgta ggtaaattct acagt	475

<210> 15
 <211> 180
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(180)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 15	
gttctcnaga tctcttcaaa attcatntg cgctatagga gctgggatta ccgcggtgc	60
tggaaccaga cttgcntcc aatggatcct ccanacngga nggggggtgg actcacacca	120
tttacagggg gctcgtaaag aatcctgttt tgantattnt nccgtcaatt accnccccaa	180

<210> 16
 <211> 457
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(457)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 16	
aatgtaacma cmaaaccyca aactcctgna agaanatggt tacttatnga tnccatttnc	60
tttttncact ctgagacata aatataaacm mantttctac tgtggraaaa catctncagg	120
ggncntttan ccatgatctc tagnacnang ggctngtggn tngttttaat gtctctaagc	180
nactngacta gtttctcttn cactgagnaa actgcnacaa gtnnttncn ctgnatctgn	240
actgnaatgc taagttncaa gtnccaatga gctngtgant tanyctttat ttnamcnaaa	300
gtnnttaatc anccncagtg ttactttgna aagctnctcc ctggacaggc ggcccnactt	360
ctaagtgtat gaatgggctg gagnancctc nactgagtt tnnwaaggnt caacanccaa	420

trgnaantgt amccgactct aaattccaac cnataat

457

<210> 17
<211> 373
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(373)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 17
atctgtgcta ggtagtgtac taatcattca gtttatctca tttaatctnn atgnaactct 60
aagtcattcg ctntgancna cacataacag atctcgcaac tgnagtttag cgaggccagt 120
taatttkcca aagntcataa tnctaagnag ttctagnatg gagattcmaa gtcnactgt 180
ttagtcaaga gaccctactg ttaactagta cctttacact actaactggg taanccataa 240
ncaattaatg ataaagattg agattactkc cacattctca ctgggtataa attaaaacnt 300
caaataaaaa ntcttggcac ttctatggta atatTTTTat taggataaac tttcaagnag 360
tggatnctag gtg 373

<210> 18
<211> 422
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(422)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 18
cccacactgn tgggccatgg aagccatgag tgtaccacat ggccctgtcc cactggccac 60
agtnagattgg ttggntcggg agtagtcacc tgattcaagn tgggccaatc agatcctacc 120
tocanggggt tnggaattag aaaacagtga ccctagyttag tntaggnac ttgaactgga 180
gggcccatac attcaggagc cttatggggc catgtacaca tggaagcagg aagantgaag 240
gagggagaag tagaggccag aaaccacct ggggttctgt ttcccaatgn taagtccctg 300
ccatgtycct gctcttctg tggttnggat cttcaaagggt tgctcaaatt nggggcagtg 360
gcctggcag cttttcaaatt cctyccatt tttattgaag ctgaaagacc cttgactaga 420

<210> 19
 <211> 395
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(395)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 19
 attgttattt ttcgtcacta cctccccggg tcgggagtgg gtaatttgcg cgctgctgc 60
 cttccttggga tgtggtagcc gtttctcagg ctccctctcc ggaatcgaac cctgattccc 120
 cgtcacccgt ggtcaccatg gttaggcacg gcgactacca tcgaaagtta atagggcaga 180
 tctcgagaat tctcgagatc tccttcmact tattacttca nttkcggtag tgatcagnac 240
 naggcagttc tattgatttc tctcctttca ttctgagttt ctccataaat taattggacc 300
 taatcatgtt tknaatcctg tcttttaggg ggnanttga ctncaagtg tttaaaggga 360
 gggncggagn atgattntgg attggagtga gagca 395

<210> 20
 <211> 487
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(487)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 20
 cagantttct gggtnaaaag gacctnanac ataatatagt ggacttncaa taaacactta 60
 ccaaattggan aatgaaccc ctggtcaccc cgatctcact agtnccctncc ctgaaacccg 120
 ananattctga gtccttttct cttttactaa cccttnctcc aatcctgctc atgggaatta 180
 angntgtaaa atangcctgg ggnacctcgg rcctctnccc tgggntctgt ggggtggagn 240
 actgtggaag ccgtwtcaat cgccccacc tatgagagcc tttctncagg gccagccatg 300
 aacgtcccc atgtnatcag natctncagg ctactgctgt cttctytgga twtttaacct 360
 ggrggcgggc caggacaga aaarggaggt ggcaagatcc ttgaacaaaa ggagctataa 420
 aagggcggtg ggggaagcaa ggcaaacggc agattaaaca agcaggcacc tcaaggaaac 480

gtgacgc

487

<210> 21
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(500)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 21
ctcgagatct ggcccatcat ttagttttat ngcttgnagt ntntagnaga taaaacatcc 60
acgtggatct nctcttagag aaatcaanta ctttaggnat ntgatagtca gagantggnt 120
atcaaatnga aaggnatntn ggtngancag ttagttngyn ccnttngnng agaccactgg 180
gntgtngasa ccagattcmk ggtncnaat cttanggtaa tctnagagcc aacacatggg 240
tcatnttats ccccaaactt agccacatct bgtggggyta tggngtcacc ccaagagcag 300
gaggagcatg gntggatgga aatccatctc caccactgga accccaawtt ctgaatgnat 360
cacctgttag agtttcttgt ycataaaata gcaggaatt taggaattta gttttttttt 420
aatagtttgg gccttttata cacactctca ggagcttagg atacttttct ccttcagctc 480
actctgaaac tccctctgga 500

<210> 22
<211> 406
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(406)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 22
tcgagatctg tggtagtnac atgatattct ggcamctact ttcattatca cctttattaa 60
aataaattta aagaaaaatg gcagtatgtt tctgtgragn ccacgagtac tcattttaaa 120
ggactcmaga gttncagrna agtaaaaagr aaagagtaaa atcattttct aantyywyw 180
ttocagaaat aacgatgttg agcattaagt ggacttcatt tcatactctt tcmmagntta 240
tgtaggcata wawatgtgtg tgtatatata tatatatggg tacatcctta gagaagttgg 300

ctggctagat agacacacnt naaaaatggr atcatactct aatkccattt nnantttana	360
aaatacatat tcagancnc tgtncttata nacagagtaa ntgaaa	406

<210> 23
 <211> 289
 <212> DNA
 <213> Homo sapiens

<400> 23	
gacccagtaa aacttatctc atgagcataa ggctgaatgg gattgacagc ctacagaacc	60
cggattttat catgagggca ttagtggggg ttgggggtta ggtactgaaa gtttaaggag	120
gtgaaaggaa agcaacttgt gccttacagg gtcaagctag gtcaaggaaa ttcccaggag	180
cgtgtggaag ctctctacct gataggtag ctcaagctta tgaccgcca agcttctccc	240
caagcttccc ttccactgct tcctcttgat tgacttcac agcaaggtc	289

<210> 24
 <211> 367
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(367)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 24	
ccatcaggat ttactgagta aaaatctcag gtnttaacca tgcccctaaa atgtgctatn	60
ccaaagagga acaggttact tgggaggaaa aaagctgcct gggnaactcc ccncaaagt	120
ttatttttaa taaaaatggt ngatggaaat atttntaaa agaacttggg gtntaatatg	180
gnatactgcc catcaaaca aaaaggaaat aaaacttcnt tcccatttat aataagttnc	240
ccacccttta ctatcaagat tacaacttat tgaccttta tgctngctng gtttttttgg	300
gactgcctaa tccaatgttt aaattttcta ngctctgnatt tcaatgtggg taggagtnat	360
ttttcaa	367

<210> 25
 <211> 425
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(425)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 25

gagtatctga caggtaagat tgcttttttaa agttgtttta aatgcattac atgactgaga	60
aaagaaaaat gcacatttta ttgttgcaagt ttaaaatttc atttngngtg aaactaaacg	120
tgaacaacaaa gggataaatg tgttttgntt ttgttttggt tttacctgtt tggggatattt	180
ttttctgagt ttgtgtagaa acccgtgtgg ntacactggg taatcttgtc agggntacma	240
amcttgggtc ttgantttgg ttanttgntt ttanttggtg nacccatgta cttgctcttc	300
cntcccagaa acatagcttg gtaggcnagg gttaanccag tgcggcgan cccatgtccc	360
tancacagca tcttgtaagt ttaatgcaca atcgttccnt cccaggatgg anttatcatt	420
ataaa	425

<210> 26

<211> 2377

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(2377)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 26

gagaggcgca ggagccacaa ataaagcaag agccagaatc agaagnngag gaagaagaaa	60
agcaagaaaa agragraana cgagaagaac ccatggraga ggaagaggan ccagancmaa	120
agccttgctt gaaacctact ctgaggccca tcagctctgc tccatctgtt tcctctgcc	180
gtggnaatgc nacacctaac actcctgggg atgagtctcc ctgtggtatt attattcctc	240
atgraaactc accagatcaa cagcaacctg aggagcatag gccmaaaata ggactaagtc	300
ttaaactggg tgcttccaat agtcctgggc agcctaattc tgtgaagaga aagaaactac	360
ctgtagatag tgtctttaac aaatttgagg atgaagacag tgatgacgta ccccgaaaaa	420
ggaaactggt tcccttggtat tatggtgaag atgataaaaa tncaaccaa ggactgtaa	480
acactgaaga aaagcgtaaa cacattaaga gtctcattga gaaaatccct acagccaaac	540
ctgagctctt cgcttatccc ctggattggt ctattgtgga ttctatactg atggaacgtc	600
gaattagacc atggattaat aagaaaatca tagaatatat aggtgaagaa gaagctacat	660
tagttgattt ngtttgttct aagggttatgg ctcatagtnc accccagagc attttagatg	720

atgttgccat ggtacttgat gaagaagcag aagtttttat agtcaaaatg tggagattat	780
tgatatatga aacagaagcc aagaaaattg gtcttggtgaa gtaaaacttt ttatatattag	840
agttccattt cagattttctt ctttgccacc cttttaagga cttkgaattt ttctttgtct	900
tkgaagacat tgtgagatct gtaatTTTTT ttttttgtag aaaatgtgaa ttttttggtc	960
ctctaatttg ttgttgccct gtgtactccc ttggttgtaa agtcactctga atccttggtt	1020
ctctttatac tcaccaggta caaattactg gtatgtttta taagccgcag ctactgtaca	1080
cagcctatct gatataatct tgttctgctg atttgtttct tgtaaattt aaaacgactc	1140
cccaattatt ttgcagaatt gcacttaata ttgaaatgta ctgtatagga accaacaatga	1200
acaattttta ttgaaaacac cagtcacaa ctattaccac cccactctc ttttcatcag	1260
aaatggcaag cccttggtgaa ggcatggagt ttaaaattgg aatgcaaaaa ttagcagaca	1320
atccattcct actgtatttc tgtatgaatg tgtttgtgaa tgtatgtgta aaagtcttct	1380
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ccagagcatg gtgttctcgt gtcgtgagca atgtgggttg ctaactgtat ggggttttct	1560
tattaataag atggctgctt cagcttctct tttaaaggaa tgtggatcat agtgattttt	1620
ccttttaatt ttattgctca gaaatgaggc atatccctaa aaatctcgga gagctgtatt	1680
taatgcattt ttgcactaat tggtccttag ttttaattcta ttgtatctgt ttatttaaca	1740
aaaaattcat catatcaaaa agtgtaagtg aaaaccccct ttaaaacaaa acaaaaaaat	1800
gaaataaaat taggcaaatt gacagacagt gagagtttta caaacatgat aggtattctg	1860
ctcggcaatt tgtaagttta catgttattt aaggataaag gtaaatcatt caaggcagtt	1920
accaaccact aactatttgt tttcattttt gtcttgtaga aggtttatat cttgttttac	1980
cttggtcat tagtgtttaa aaatgtactg atgatgtgct tagagaaatt cctggggctt	2040
tcttcgttgt agatcagaat ttcaccaggg agtaaaatta cctgaaaacg taagaagttt	2100
taaacagctt tccacacaaa ttagatgcaa ctgttcccat gtctgaggta cttattttaa	2160
agaaaggtaa agattggcct gttagaaaaa gcataatgtg agctttggat tactggattt	2220
tttttttttt taaacacacc tggagaggac atttgaaaac actgttctta ccctcgaacc	2280
ctgatgtggt tccattatgt aaatatttca aatattaaaa atgtatatat ttgaaaaaaa	2340
aaaaaaaaaa aaattcctg cggccgcaag ggaattc	2377

<210> 27
<211> 489
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(489)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 27
attggagctc caccgcggtg gcggccgctc tagnaactag tggatcccc gggctgcagg 60
aattctcgag atctcccca agtaaataa tgaaaaaaag aacagcaaca atagagatga 120
tataataagc caggcatgga tgacctata gcacctgta ttatacaga accaccagga 180
ggatagtcac gacaacnatg aactgatca tgatnccagc attcagaatt gagtncaggg 240
ctctctggcc cacagtctcg gtatcttctg tgnatggggt atagattarc tgtccatcct 300
tccgggnata aaantgact gacttaatgg tanccacgac caccacccat kcagagagtc 360
acagggacma aagagcatga tcaacatgct tggcnccata tttcaatntc anctcctcat 420
cttcttcctc atcttntctc accacctncc gggagttaac cctggggctg tccattagat 480
aatggtc 489

<210> 28
<211> 2307
<212> DNA
<213> Homo sapiens

<400> 28
agggtgcttc agtgtggctg acacagcagc atggtcttga caagttttct tcatectacc 60
acaaaatccc agttggtaat agagacttta ctctaccta tcaaaaccac aaaatgtccc 120
attagggggg gacatgttgt acatgttagg atcattcaaa taaccaagat tataagggtga 180
ggaaagatgc ccctaactga ttcttttctg tctcatcttg ttggttccag ggaccgagtg 240
gggtcaatct tctggtstg cctctccagg tctcttccag gccggtcata gacgtactcc 300
ctctgaggcc gaccgatggt tagaagaggt gtctaagagc gtccgggctc agcagcccca 360
ggcctcagct gctcctctgc agccagttct ccagcctcct ccaccactg ccatctccca 420
gccagcatca cctttccaag ggaatgcatt cctcacctct cagcctgtgc cagtgggtgt 480
gggtccagcc ctgcaaccag cctttgtccc tgcccagtc tctctgtgg ccaatggaat 540
gccctatcca gccctaata tgctgtggt gggcatcact ccctcccaga tgggtggccaa 600

cgtwtttggc actgcaggcc accctcaggc tgcccatccc catcagtcac ccagcctggt	660
caggcagcag acattccctc actacgaggc aagcagtgt accaccagtc ccttctttaa	720
gcctcctgtc cagcacctca acggttctgc agctttcaat ggtgtagatg atggcaggtt	780
ggcctcagca gacaggcata cagaggttcc tacaggcacc tgcccagtgg atccttttga	840
agcccagtgg gctgcattag aaaataagtc caagcagcgt actaatccct cccctaccaa	900
ccctttctcc agtgacttac agaagacgtt tgaaattgaa ctttaagcaa tcattatggc	960
tatgtatctt gtccatacca gacagggagc agggggtagc ggtcaaagga gcmaaacaga	1020
ytttgtctcc tgattagtag tcttttctact aatcccaaag gtccaagga acaagtccag	1080
gccagagta ctgtgagggg tgattttgaa agacatggga aaaagcattc ctagagaaaa	1140
gctgccttgc aattaggcta aagaagtcaa ggaaatgttg ctttctgtac tccctcttcc	1200
cttaccctt tacaatctc tggcaacaga gaggcaaagt atctgaacaa gaatctatat	1260
tccaagcaca ttactgaaa tgtaaaacac aacaggaagc aaagcaatgt ccctttgttt	1320
ttcaggccat tcacctgcct cctgtcagta gtggcctgta ttagagatca agaagagtgg	1380
tttgtgctca ggctgggaac agagaggcac gctatgctgc cagaattccc aggagggcat	1440
atcagcaact gccagcaga gctatatttt gggggagaag ttgagcttcc attttgagta	1500
acagaataaa tattatatat atcaaaagcc aaaatcttta tttttatgca tttagaatat	1560
tttaaatagt tctcagatat taagaagttg tatgagttgt aagtaatctt gccaaaggta	1620
aaggggctag ttgtaagaaa ttgtacatra gattgattta tcattgatgc ctactgaaat	1680
aaaaagagga aaggctggaa gcatgcagac aggatcccta gcttgtttcc tgtcagtcac	1740
tcattgtaag tagcacattg caacaacaat catgcttatg accaatacag tcactaggtt	1800
gtagtttttt ttaaataaag gaaaagcagt attgtcctgg ttttaaacct atgatggaat	1860
tctaattgtca ttattttaat ggaatcaatc gaaatatgct ctatagagaa tataatcttt	1920
atatattgct gcagtttcc tctgttaatc ctttaacact aaggtaacat gacataatca	1980
taccatagaa gggaacacag gttaccatat tggtttgtaa tatgggtctt ggtgggtttt	2040
gttttatcct ttaaattttg ttcccatgag ttttgtggg atggggattc tggttttatt	2100
agctttgtgt gtgtcctctt ccccaaacc cccttttggg gagaacatcc ccttgacagt	2160
tgcagcctct tgacctcgga taacaataag agagctcatc tcatttttac ttttgaacgt	2220
tggcgcttac aatcaaagt aagttatata ttttgtact gatgaaaatt tataatctgc	2280
tttaacaaaa ataaatgttc atggtag	2307

<210> 29
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(343)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 29
ggcagctatt tacatggcct cacaggcac agctgaaaag aggacccmaa aagaaattgg 60
agatattgct ggtgttgctg atgttacaat cagrcagttc tatagactga tctatcctcg 120
agccccagat ctgttcctta cagacttcma attkgacacc ccagtggaca aactaccaca 180
gctataaatt gaggcagyta acgtcmaatt cttgannacm aaacttkncc tgttgtagat 240
agcctatacm aaatgctggg ttgagccttt cataaggnaa aacmnaagac atggntacgc 300
attccagggc tkgantactt attgcttggc attcttgtat gta 343

<210> 30
<211> 363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(363)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 30
aaagggctaa ccagccactg caccaaaatt agtccttaca ttataatact ctggccattg 60
gaagagaaaa atgggaaaat tcaacaattt gaaagactat gatccctctg gctcatgatc 120
tactgaccag aatgaagtcc tgaaggattt ccttctgtta tggtatctac ccagctaatac 180
tcaaacaaga ggagctggaa agaacaaagc cccatgaagc taccctaga cccagaaagc 240
caagaacagg gccaaagaaa tgaacagcag acaagcctga aatagaagtg gnacagacat 300
gtggnaagac caagtacacc cagttingtg gtaaagattc cgatatcaag cttatcgata 360
ccg 363

<210> 31
<211> 362
<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(362)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 31

agtacatggt ttcttgncca ccccasccac ctttcccat ctctaccggy tgatagtctc	60
tcagntagta gaccttttct ngtttagrca gggccacntt tttaaaaact ccagacgggt	120
accctccatg tkgmaggcga cgtggccctg gatcactcaa ctgantgtca tnkgantggt	180
gccccagag tgaggacaat ggtgnagccc tcctaaggcc ctncctgagt gtccctcctt	240
catgaagatg attctgaggn ttcccaggcc tncacccttc ttkgaaarcc catagnagtt	300
catatgnact nctctnctat gctcaccaaa ctctnccttc atcatacttg ggggatgtgt	360
gt	362

<210> 32

<211> 475

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(475)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 32

gtgcatgtaa ttacagttac gatatatgaa acgtacaaaa tattatgagt atataatatg	60
gggagactta atctagtttg ggggatcagg gcacatttct ctaagaaagt gacatttgaa	120
ttgagctctg aaggataaat agacattacc cagaagaata aaatgatggg gaagaaggag	180
gacattttcc gtagatttcc agtggcccn cttgatccct tatccactca tcactnagga	240
ggatattaaa tkctatagaa atggragraa gacmmaaaga gaccctnata tctcgagagg	300
atccagcmaa attccaagag acacaacawt aagaaactng gaaggaagag aaaaggcmmn	360
nnaggnaaaa gaaagacaag gaaattnnnn nagnacggag agaaagagag agggagcgtn	420
naagggnacg agaaaggcga gnacggggac gagaaagggn aagagnacgt aaacg	475

<210> 33

<211> 346

<212> DNA

<213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(346)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 33
 ggaaataaat gagatctcag tgggtggtatg gattggactg atctctgtaa ctgtgtntgg 60
 aaaaaggacc ggaaatgaa agccagatcc cagtaagggg tagagagggg ccaagagaac 120
 tgaacatctg ggctgccgga gaaatcaaag tctaggaagt aagaggtaag agtgtactac 180
 aggggacata cccaatctc ttggttcctt ccctctncct tcctctcca gagaccagg 240
 tccctgggac tatnttggat ctgtctctga agctgaaaaa caaaaggcag aggagacagt 300
 cggntctaag tgaccaatct caagccagct tggtcagaan tcctaa 346

<210> 34
 <211> 433
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(433)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 34
 aaatccagtg caggcaacat tatgtggaaa tagaaacagg gtccttgcta ggagattgan 60
 attctggctt tcctttggaa cccctcactg actcatcgcc cctgaancag ganccancag 120
 gtnccaaggc tcccctgctc ctntccctnc cccagggcga gataggaarc cggaarcctg 180
 ggcaggctga rccanccga ctggaaccag ggnagancct gtgggtgggt ggnaggagg 240
 gaaggaggcc agattcctcc agaactggg ragagaacag gttttggaag ttgggggagg 300
 gtttgggttt cacagtgatg gtttcatgan accctggagg gttncacact cctggtkcan 360
 ttttgntant cgtnccttga anacarnccg cttcctttca accctccncn taaaaagttt 420
 tgatntttta agg 433

<210> 35
 <211> 350
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature

<222> (1)..(350)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 35

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accaaagagcc cccagtttat gntaactctc atgacaaaca caattttagt acctctcact      60
accaactatc caggaaccag gantcaccta ttactacggt tccagcagaa tgggaatccc      120
attctcggat atccagggtg aatccctgac catgtgagag gaatcctagt gcccacaaca      180
cctcaccccc tgactcctcc tcaanggctc tgccaagtca acaaaaaaat cctctacatt      240
tacactatct gtaaagccaa agaccagcgt caacctaaat gtccatcaat aagggaatgg      300
ttggataagt aaaaattatg cagctgtagg aaggaaatgaa gaatgtctat      350
```

<210> 36

<211> 512

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(512)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 36

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aaaggaaca aaagctgga cggggcccc cctcgaggtc gacggtatcg ataagctgga      60
tatcgaatcc tcgagatcta ctaaaaaaaaa aaaaattaac ttcccaaagtg tgggagtcta      120
ctctgttccc tcctngtntt tattnctgtn tacttitycta anatgggttaa aatgtgtaan      180
caatatgtgt ccttnactn kggkgtgaac atttitycta ttataaatyc twagaaaata      240
ttnctatggn tatgagatat tkgattccaa gtgcctkgta atttactyct caaatgtccc      300
tgatgtkga nattkgttnc tagtgtyca ctatttaaaa aaacagnaat atctgtctnt      360
atgctnagag ctnttycagt ttycaaatta ttnccctagg gtaaaatcct agaagtagaa      420
tttttggggc aaattatcta catatttata attgtcttgg tattccaaat ctcgttttcc      480
aaaagcttat atcaatttgt acttaacacc ag      512
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<210> 37

<211> 450

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(450)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 37

atttaagatg actgggggtc tctncctaataat cccataactcc actggagagg anaagtggga	60
aaggttggtc tagttarggt ngntggggac cctcccaaga gctgnagaag cagagataag	120
nagagcctnc tntctaaatcc acatggncct yccaaggntc tcatectcta ggacctacca	180
ctnctcagtc tacttacttg tctyctgana tgctttctng aggggnagaa aacaaaggaa	240
gagtaataac aagcagnaga aactgcagag aatgnaaaat aagtccatag gagaatgttg	300
naaatagaat catcncctt tacatattgt cactccagga aaactgccaa gaaccactca	360
ttcctctaga tacamttcct gtaggatccy cccagacttc ctcccttaag cacgtcagta	420
ttctccttat tctcccttca tttcaaccct	450

<210> 38

<211> 766

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(766)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 38

cgagatctgc cccagcccac atttcctttg ttgaatgagt agagaagact gagaagtatc	60
actcaccgt gatgtggtt gtcccttttc cagccagtgt gttggttaata aaagtcacct	120
ttcagagctt tgggtcccgat aatgcccgtc tttcctgtgt ccaggaataa cctttgntac	180
taggcagtc tctgaaagat ttgtagaagg ttaaagtggga aagggacttg gaagctcata	240
gaatccatgc ctcttctttt agcatcaagg aattagaagt cctgagagat gaagaatgtt	300
gtcttcccaa ctcaaaccba tttcttgaag ccatttcctt ggttactgna ttggccacaa	360
cccttcccc ttgntatcct catcctgcta atgctgtttt taatggcctg ccagtctgga	420
tttgtctttg gcaaccaaac aattttgctt cacaagattc ctacttaagg gaagagaggg	480
gtcctcatt tntcacttgt acaagagcag ggctggtcag ctttacacag gtgtcagatg	540
aaccgtcaca anccagantt ncatgttggc ctcaggaggg cttcnaggtc caacatctcg	600
acgtaaggag cgttcccagt tctttcatgc tcagataaca gtnctaactn cagctgtttc	660
atccnaatc cctanttgag gtcttaacat ctattccatt ttkccnagma gggttatnct	720

gttaaccctc tncaccagan ttaganctga ctgatncact tcctag

766

<210> 39

<211> 327

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(327)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 39

tcatacttgt atagttcknt aagataatca ctctctcact cagacatnng gngrarngcc 60

cntcgatcac ttggganagg ngacttgcm a tgtttaatga ttgtcancm nanaantaag 120

ctnacagggc aaaaacagcc tyangtcagt tctntctccc taatcctcta graknaaatc 180

nnawrntrnn actctgnntc tgtgccatna nanatnttnc anttgtatnt atgnactcca 240

catngagtac acctcactaa wtnntctnct gggnaacncc cscmccantt ttnntttgnt 300

gananacarc aatgctggca tacngtg 327

<210> 40

<211> 431

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(431)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 40

ccagactttc ataactngtg ttattatgaa gattagagtn ctgaagctta ctggattaga 60

agagnacgag ggggtagctg cccaatata ttctaatttc tctkgaggac caccaaantg 120

gmagagtgtc tctgataggg aaaaggaaga gttggaaggn atcttagcct ctagganaaa 180

agaaccatnt ttattggcca ccaaagttac atctagtkgc ctacaaatnt atntccaaac 240

tccttatcct gccaatcag ggtcctgnaa actgatgcc aactatagtt tagtctncta 300

tcacatgact gcattatata tacccaatta tctgggmaaa cagacctgat ccaaacacag 360

ttkggtntct tccttncctt nccttkgttt agcctgtycc gtctactnng ggtgtcttkg 420

atttgctcca g 431

<210> 41
<211> 276
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(276)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 41
tttttttcca ccagacttac caaatTTtag atgnatggaa gaactgtaaa tncccataaa 60
gntaatctat ncatngaccc ccaccattat gatagagatc atntgggtgan taatgaaaga 120
tgaaactctc agctgggaaa gtaanaagga ataggatgta agtatgagct cctgtttttt 180
attatnttta tggatgcccc ctcaaaaaa tatgnaangg ggtaactgac tnggaaatgg 240
gtnttttatg natagtaagt cccactcacg aggttt 276

<210> 42
<211> 270
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(270)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 42
tcgagatcta aagcagatgn agactttnc cnaaataaat ttactgcttt ttttctgtga 60
nataagttnc gagaaggaaa gctttkgatt nctrnatgag tycagtggat tatyctnagn 120
actagagtkg nkgtkgaagn catggnacat ttatatagwt ywttcagttc tacactaaat 180
gatggaagaa tgagaaatcc tatatgacaa atagaaaagt ycatyctyca taattgagaa 240
cattgagcag ttggattacc aagatctcga 270

<210> 43
<211> 580
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(580)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 43
 cttagtttta gactagtttc attatactac cagtttctaa tatgttggtt ttttattcac 60
 tatttgatat atttgtttta atatatgttc ttgttttagc aggtaaaaga atcataacaa 120
 atgtttttta aagaacatta ttattcttta ataactgtct ttttatgcat ttggcatgcc 180
 aacttttttc attaacatct tgggtatttt ataaaaagag ggaaagctca atgtttaaca 240
 ggtagctttt cttaggagct aaattaaata ttaacaaat ctcttccct tcnccttcc 300
 ccatccctca aagnatgggt gnanntatct ttaacttttg ggctngcatc cntgnaagct 360
 tatggntant catagtctna cmaaactagg gtcaccnaac ttggcagcag aaataatcta 420
 gtcttactgt gataactacc caattacttt attatttttc cagttncagt tccaaatgtt 480
 ttgtggnaan aatttttntct gtttgtgatt ttccaagctt agagggggaa accaactttc 540
 cagtgttgga gagcactgna tagtttatgn attgtgtaaa 580

<210> 44
 <211> 348
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(347)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 44
 tgtttcttaa nacagaaaaa aatttactga tnggacattg ttctaagtgt attattgtat 60
 taaatggatc atttaattta atcttcataa ctgacatagg agttgagtaa cttgtgtggt 120
 caaatagcta gtaagtgatg agtaggctgg gcgcagtggt tcaagcctgt aatcccagca 180
 ctctgggagg ctgaggcagg cagatcactt gaggtcagga gtttgagacc agcctggnga 240
 acatggnaaa acctcgtctc tactaaaaat acaaaaatta gctgggcgtg gtggnggcgc 300
 acttgtagnc ccagntactc ggaaggctng aggcaggagg aatcgctt 348

<210> 45
 <211> 430
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(430)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 45
gctcatcatg cttcacgggg gaggctgtgc gggaagaatg ctccacaca gnataaagaa 60
tgctcccgca caggatagag aatgcccccg cacagcatag agaagcccc gcacagcata 120
gagaatgccc ccncacagca tagagaagcc cccgcacagn atagagaatg ctcttcacct 180
ctgggttttt aaccagccaa actaaaatca cagagggcaa cacatcattt aagatagaaa 240
tttctgtatc ttttaatttc tttcaaagta gttttactta tttncagatt ctatttcttt 300
actagaatta agggataaaa taacaatgtg tgcataatga accctatgaa acaaacaaaa 360
gctagggttt ntncataggt ctncctccnn attgaatgaa cgtctntcct caaatctanc 420
ccccagggga 430

<210> 46
<211> 402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(400)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 46
caaaccctat gngaaatgga aaggaaacta ttctaaagca taaaaggtag aaatatatat 60
accaccatc aagaaagatt atttttgntg aactcaagtc accagagtgg ctaaagccca 120
gtagaatgga aatgattata tggaaggtga ggccaacggg accagaacat actgtgatag 180
acagnaagga gctgtctatc ttctattctc ccacagaagg aggtgactaa gtcantgccc 240
caagcaatgt tatatctgca attgatgtnc agcagtacaa gtctgaacaa cttggattgg 300
ntgattaant gtcnacant aaacatacaa gtcntaatag ctatctctat atagtctttg 360
ggtntttaca aggcactgnc acatnatctc acctattcct cc 402

<210> 47
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(500)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 47
 agnatccaga attgagtgna gngttctctg gnccacagtc tcggtatctn ctgtgaaatg 60
 gggatatagat tctacaataa aacaaacaca nnggccctag gtcagtgtta atggagatca 120
 ccancacat taccacctcc aacacagaat tttctttttc ttaatncaat ncgtntctta 180
 taagtcactt tnccccaact caccaatcta gntaagaatt tttaccctga gaaaaacagc 240
 tacactctaa aattgctnca aagaaaatgt ctaacatntg gaaagaagga cttaacatgt 300
 gangnagaca ctgggtccat ctagnnggtg cttntttttg aaataattat aatnccncat 360
 caaattttng ggggntacag cttattagga acttggtata gaaccagatt ctgccacaga 420
 anccacgtgg gttgacaagt ggttgncaga agaaaggtaa tatggcttat nattagggnc 480
 tcncatctgc agagtaattg 500

<210> 48
 <211> 460
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(460)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 48
 aaaatgcttg anncaaagt catctagttc catctctacg actctcatgg ggtccaaaga 60
 agagttttan ttgagtttta gaatgtgaag ttgtgaagtg tctgaaaaac tacatgggtg 120
 tctgaaagnc aaacttttag ccttggggga gagcatctaa gacagnaggt gaagggnagg 180
 ggttagaact agagggattg aagaatatta tccatatagg ttaggggttag gtnnggcaac 240
 gttttataga acaaacattg gcaagctaca gccacaggcc agatctgtct nctaccttcc 300
 caciaaggtg taataacaaa gttattcaca aatgtgtgaa taaactnnca ttggaaagtg 360
 cccacgtcc tnggtttata cattgtctgt ggctgctttc aactacagt agcacaggtg 420
 agtgtntgca ctggagacca tatgccccat agagctttaa 460

<210> 49
 <211> 372
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(370)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 49
atcaagcaac agtgtgttat gcctatactc catgtttata tgttgtgtatt aaaaaatgta 60
tttngtatat atgtgtatgt ataagtgtgt gtgtgtgtat gatgattctn ctcccgnttt 120
gaaggtgaaa gaaagcacac ctttatttaa gcataaactt tgggtttcan gatactgtct 180
ggaaaaatga tttatctccc actttgaaat tccaaaatac gtacatatat tttttttttc 240
ttttcttttt tagtttnagg gtcttgctgt gttgcccagg ctggagtgca gtagtgtgat 300
catagntcac acagnctcta actcccaggn tcaagntatc ttcctgcccc agnctcctga 360
gtagntggga ct 372

<210> 50
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(500)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 50
caaaaaatca aagggaagnt ggaacccctg cccacctctc cattccccat tctgctggtg 60
gtgnctgctc ttcctcacag tacctcctga aaagttcaga attcagttaa tacagaatta 120
ttgggttgat tttcaacgtg tagtttaaga tgaagagttc cgnttggttt aaaccacttc 180
acctaacctc ttggtaacgg tagtcctgag agttcgcagt gtcantgaaa atcgtcctgt 240
gaccacgcgt caagctgctg atgggggaca gaaacttccg ggnctatcat atctccttga 300
nctcggccct caaatctggt agtttctgca ccgagggaca cagtccactg cgatgaagta 360
tgttcaaaat cgntttcttt agggaaactcc ttccaaagtc caatagtga aggtggtcaa 420
ggaaggattt ggaaggaagn tgnaaaagtc agncgggaat cttgatttgg ntagntgtgg 480
ananaggaaa tcacttggcc 500

<210> 51
<211> 105
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)..(105)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 51

ggaaagaggt ctcctaacac ccagacagtg taaaaatcca gttttttcttc cttttggng 60

gagacagagt ctgcgactgt agctcaggct ggagtgcagt ggcac 105

<210> 52

<211> 387

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(387)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 52

agtcccagct actcaggagg ctggggcagg aagatagctt gagcctggga gtttagaggct 60

gtgtgagcta tgatcacact actgcactcc agcctgggca acacagcaag accctaaaac 120

taaaaaagaa aagaaaaaaa aaatatatgt acgtattttg gaatttcaaa gtgggagata 180

aatcattttt ccagacagta tctngaaacc caaagtttat gcttaaataa aggtgtgctt 240

tctttcacct tcaaagcggg agaagaatca tcatacacac acacacactt atacatacac 300

atatatacaa aatacatttt ttaatacaca catataaaca tggagtatag gcataacaca 360

ctgttgcttg ataaaatata gggatcc 387

<210> 53

<211> 380

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(377)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 53

tatatttnat caagcaacag tgtgttatgc ctatactcca tgtttatatg tgtgtattaa 60

aaaatgtant ttgtatatat gtgtatgtat aagtgtgtgt gtgtgtatga tgattctcct 120

cccgnttga aggtgaaaga aagcacacct ttatttaagc ataaactttg ggtttcnaga 180

tactgtctgg aaaaatgatt tatctccac tttgaaattc caaaatacgt acatatattt 240

tttttttctt ttctttttta gtttnaggg	cttgctgtgt tgcccaggct ggagtgcagt	300
agtgtgatca tagntcacac aggctctaac	tcccaggntc aagctatctt cctgccccag	360
nctcctgagt aggtgggact		380

<210> 54
 <211> 521
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(521)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 54		
ctgcagtaag ccacgttcat gccactgtac	tctagcgtgg atgacagaga gagatcctgt	60
ctttggaaga aaaaaacaaa aagaaaaaaa	aaagagtatg gccatggcct tataatatag	120
aaggggtcac atattaatct ctgaaaatgg	atctcttgtg ggctttcata caaggcaaca	180
gccacagagt acgtacctga aagctgcctg	ggnttaatgg ctggnagtat gttctaactn	240
gttcaggnac ccatgtcacn actggtgggt	acagaatgtg aatctcacac tgtccnaaat	300
cggttttatt tttaaaanga ataattctan	tacattacct tataaaaagt aggtaaccta	360
attttggnntt ttaaaagtga attgagggca	gatgcaagtg gntcacacct attaatccca	420
aataccttgg agagggcaag gtaggaggat	tggttggagc ccaggagtcc aaagaccagg	480
ctagggaata ttgnaagaan gtcctctcta	caanaaanaa t	521

<210> 55
 <211> 516
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(516)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 55		
ctgcangaag cttttnttnc ttttngngg	agacagagtc ttgctgtgtc ancccaggct	60
ggggtgcagt ggnacagtca tagctcactg	caaccttgaa ctccctggnt catgcgatcc	120
tcccacttca gcctctcaag tagctagaac	tacaggtgtg caccaccatg cctgactaac	180
ttgtttattn gngggagaga gaacgntctt	gctatattgc ctaggctggc cnttgaactc	240

ttgggntnca agcaatcctc ctaccttggc ctctncaagg tanttgggat tnataggtgt	300
gagccacntg catctggcct caattcactt ttaaaatnca aaattaggtt acctactttt	360
tataaggtaa tgtattagaa ttattcttnn naaaaataaa accgatttgg gaaagngtga	420
gantcacatt ctgtaaccac cagtgggtgaa atgggtcccc gaacaaggta gaacatactc	480
ccagccatta accccaggga gngttcaagt ccgtnc	516

<210> 56
 <211> 505
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(505)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 56	
ggatcctgtt tcttaaaaca gaaaaaaatt tactgatagn acattgttct aagtgtatta	60
ttgtattaaa tggatcattt aatttaactt tcataactga cataggagtt gagtaacttg	120
tgtgggtcaaa tagctagtaa gtgatgagta ggctgggagc agtggntcaa gcctgtaatc	180
ccagcactct gggaggctga ggcaggcaga tcacttgagg tcaggagttt gagaccagcc	240
tggccaacat ggnaaaacct cgtctctact aaaaatacaa aaattagctg ggcgtggtgg	300
gtgcgcactt gtagtcccag ctactcggaa gggttgaggc aggaggaatc gcttgggtccc	360
cgggagggag aggttgntng tgnagctgag atcacgccac tngcactcca ggctgggnaa	420
caaaaggag accttttctc aaaaaaaat naaaaataaaa agtgatgagt aggattggga	480
cccnagacat cttttctcca agacc	505

<210> 57
 <211> 500
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(500)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 57	
ctgcagnctc aaacccttgt cctgggatca aacaatcctc ccacctcagc cttcaaagta	60

gatagaacta caggcatgca ctaccatgcc taatttttta aaaaaaaatt ttttttcaga	120
gatgagatct cactgtgttt cccaggnttg tccggaactc ctggactcaa gcgatcctcc	180
caccttgggc tgccaaagtg ttgggattac aggcattgagc caccatgcct ggccatacac	240
tttttttttt tttttaanca agacggagtc tngttctgtc gccagactg gagtgcaggg	300
gcgttnnatct tggctcactt gaaagcttcg cctcccaggg ttcattgccgt tctcctgnct	360
cagcctccca agtnggtggg actacaggna tctgcaccac gnccggttat ttnttggggt	420
tgngnaggg acgggggttc accatgttag gcaggatgac ttcggacttc cngaccaag	480
atcacctgc tcggctccca	500

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<210> 58
<211> 440
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(440)
<223> where n may be either a or g or c or t/u, unknown or other

```

<400> 58	
gaattccaga cgagcctggg caacacagtg agactctatc actacaaaaa aattttaaaa	60
ttagctaaag ttgatggnac atgcctgcag tcccagctac tcaggaggct ggggcaggaa	120
gatagcttga gcctgggagt tagaggctgt gtgagctatg atcacactac tgcaactccag	180
cctgggcaac acagcaagac cctaaaacta aaaaagaaaa gaaaaaaaaa atatatgtac	240
gtntttgggg aatttcaaag tgggagataa atcatttttc cagacagtnt cttgaaaccc	300
aaagtttatg cttaaataaa ggtgtgcttt ctttcacctt caaangcggg agaaggatca	360
tcatncacac acacacactn atcatncaca tttttacaaa tncaattnnn naatacaaca	420
cattttaaca tgggggttttg	440

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<210> 59
<211> 513
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(513)
<223> where n may be either a or g or c or t/u, unknown or other

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<400> 59
 ggatcctggt tcttaaaaca gaaaaaaatt tactgatagn acattgttct aagtgtatta 60
 ttgtattaaa tggatcattt aatttaattct tcataactga cataggagtt gagtaacttg 120
 tgtgggtcaaa tagctagtaa gtgatgagta ggctgggagc agtgggtcaa gcctgtaatc 180
 ccagcactct gggaggctga ggcaggcaga tcacttgagg tcaggagttt gagaccagcc 240
 tggccaacat ggnaaaacct cgtctctact aaaaatacaa aaattagctg ggcgtggtgg 300
 ntgcgcactt gtagtcccag ctactcgga ggctngaggc aggaggaatc gcttgatccc 360
 ngggagggag aggttggtng tgangctgag atcacgncac ttgnactcca gnctgggnaa 420
 caaangngag atctntctc aaaaaaaaaat aaaantaaaa ngtgatgagt aggatttgga 480
 cccagacat cctntctcca ggacctgna ttc 513

<210> 60
 <211> 390
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(390)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 60
 gaattcctgg nctcaagtga tcctctcacc tcagcctccc aaattgctgg gattagagtg 60
 tgagccactg tgcctagcct gcatatatct atttttaatg actgctaaat ctcatgtat 120
 gaaaatttat gtcctagcta taaaatttgn tagcacatgt ttaatttttt ctaatttcag 180
 atgttttaaa ctaatatctt ccaaagtata gtatggcatt ttaggtatga tatgatcttt 240
 nntcctcttc gtactcattt ttatagttat ggctgtgca actggtttcc catttatatg 300
 aatgatacag agcttcctat taagaaaaag ttcagcttgg ggaaaaaaa agtgaattgt 360
 caactngag ggaaaaaagt gaattattgg 390

<210> 61
 <211> 366
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(366)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 61
 tcaagtacct ccctgaatgg actgctgtggc tcctcttggc tgtgatttca gtatatggta 60
 aaaccaaga ctgataatct gtttgtcaca ggaatgcccc actggagtggt tttctttcct 120
 catctcttta tcttgattta gagaaaatgg taacgtgtac atcccataac tcttcagtaa 180
 atcattaatt agctatagta actttttcat ttgaagattt cggctgggca tggtagctca 240
 tgcctgtaat cttagcactt tgggaggctg aggcgggcag atcacctaag cccagagttc 300
 aagaccagcc tgggcaacat ggcaaacct cgtatctaca gaaaatacaa aaatnngncg 360
 ggnatg 366

<210> 62
 <211> 498
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <222> (1)..(498)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 62
 aacaccaggg ncatgagggc actaatcata atgagatatg cctgctggag tcgaagtgga 60
 cctttccagt gaatggaaat cattcccacc acaccaaact tccagatcag gagtgnaaca 120
 gtaatgtagt ccacagcaac gttatagggt ttaaactctt ccctgaaaaa aaattacaca 180
 gattttaaaa gatgtacaat aatttccacc aaaacattat ttagaataat gtgatggctc 240
 ccaaactata gatattaatn tcccactttt ataattttac cataacctat atcaactgtg 300
 ctattattta tttaatnctt cctntaaat taattttact tttttttgtt tttgtttttg 360
 ngtttgagc cagtgtctca ttttggttgc ccaggcttgg agtaaagtgg gtgcaatcac 420
 ggctcaactg nagtctttnc ctccnggaga tcaggtnngt cttccccagg tccaanctcc 480
 taagttggtt ngganaac 498

<210> 63
 <211> 469
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <222> (1)..(469)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 63
 taaacaacag ggncatgagg gcactaatca taatgagata tgcctgctgg agtcgaagtg 60
 gacctttcca gtgaatggaa atcattccca ccacacaaa attccagatc aggagtgaag 120
 cagtaatgta gtccacagca acgttatagg ttttaaacac ttccctgaaa aaaaattaca 180
 cagattttta aagatgtaca ataatttcca ccaaaacatt atttagaata atgtgatggc 240
 tcccaaacat tagatattaa tntcccacct ttataatttt accataacct atatcaactg 300
 tgctattatt tatttaatnc ttccctctaa attaatttac tctttttttg tttttgtttt 360
 tgtgttttga gccagtgtct cattttgggt gcccaggcct ggagtaaagt ggggtgcaatc 420
 acggctcaac tgnagtcttt acctcccga gatcangttg gtctttccc 469

<210> 64
 <211> 370
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(370)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 64
 gtttatcaag tacctccctg aatggactgn gtggctcatc ttggctgtga tttcagtata 60
 tggtaaaacc caagactgat aatttgtttg tcacaggaat gcccactgg agtgttttct 120
 ttctctcatc ctttatcttg atttagagaa aatggtaacg tgtacatccc ataactcttc 180
 agtaaactcat taattagcta tagtaacttt ttcatttgaa gatttcggct gggcatggta 240
 gctcatgcct gtaatcttag cactttggga ggctgaggcg ggagatcac ctaagcccag 300
 agttcaagac cagcctgggc aacatggcaa aacctcgtat ctacagaaaa tacaaaaatt 360
 agccnggnat 370

<210> 65
 <211> 316
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(316)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 65
gtcatggtgt tggcgggggag tgtcttttag catgctaag tattataatt agcgtatagt 60
gagcagtgag gataaccaga ggtcactctc ctcaccatct tggttttggt gggttttggc 120
cagcttcttt attgcaacca gttttatcag caagatcttt atgagctgta tcttgtgctg 180
acttcctatc tcatcccgna actaagagta cctaactcc tgnaaattga agnccagnag 240
gtcttggcct tatttnaccc agcccctatt caaaatagag tngttcttgg nccaaacgcc 300
cctgacacaa ggattt 316

<210> 66
<211> 448
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(448)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 66
ctgcagnccg ggggatcctg gtaaaagtca caaggtcagc ctactaaagc agggaaaact 60
aaaggcaagt aaacacgtgc agacaaaaaa agggataaag aaaaggaatt aagaaactag 120
catttttaan gtgggggagg tgaatgcttc ccagaatggg tttatatcac ttgcttgngg 180
gccttctgag tgttggnaac aacctgtcat catcacacat acctgtcatc tttaatggtc 240
tccatacatt actaatagat tatacagatg gccatcactt aacacttcca ctactcaat 300
ttgtncaca tgcaagggtta cctctttttt tngcttacng ccacaaagca ttgganaagg 360
tttgtgattt ttactagccn ccacttcac aaatttaagc attttctttt tcctnttaac 420
anccaggaca ggnttnaacn aaggaaat 448

<210> 67
<211> 450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(450)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 67
ctgcagctcc aagcaccttt ttcaaattca gctttctgtg atttcagacc acatatgcaa 60

ggaactatct taccttaatt aataagactt taaaatcctt gtgtcagagg cgtttggacc	120
agagcaactc tatcttgaat aggggctggg taaaataagg ccaagaccta ctgggctgca	180
tttgcaggag gttaggtact cttagttacg ggatgagata ggaagtcagc acaagataca	240
gctcataaag gatcttgctg ataaaactgg ttgcaataaa gaagctggnc aaaaccacc	300
aaaaccaaga tgggtaggag agtgacctct gggtatctc actgntcact atacgntaat	360
tattatacat tagcatgcta aaagacactc cccgcaacaa ccatganagg ttacaagtt	420
nccatggnaa cgnncccgga ngntancttg	450

<210> 68
 <211> 388
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(388)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 68	
ctgnagcctc caccaccag gttcaggtga ttctcctgcc gtagnctcat gagtagntgg	60
gattacaggc atgtgccacc atgcccgact aatttttata tttttagtag agacggggtt	120
tcaccatggt gggcaggctg gtctcaaact cctgacctca agtgatctgc ccaccttggc	180
ctcccaaagt gctgggattt caggcgctg gcctgttact tgattatatg ctaaacaagg	240
gggtggattat tcatgagttt tctgggaaag aggtgggcaa ttcccggaac tgagggatcc	300
ctcccctnn nagaccatac aaggtaactt ccggacgttg gcatggnatc ttgttaaact	360
tgatcatgng ttggggggga gtgtcttt	388

<210> 69
 <211> 500
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(500)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 69	
ctgcagaagt atgtttcctg tatggtatta ctggataggg ctgaagttat gctgaattga	60

acacataaat tcttttccac ctgaggnca ttgggcgccc attgctcttc tgcctagaat	120
attctttcct tttctaactt tgggtggatta aattcctgtc atccccctcc tcttggtgtt	180
atatataaag tnttggtgcc gcaaaagaag tagcactcga atataaaatt ttccttttaa	240
ttctcagcaa ggnaagttac ttctatatag aagggtgcac cntacagat ggaacaatgg	300
caagcgaca tttgggacaa gggaggggaa agggttctta tccctgacac acgtggtccc	360
ngctgntgtg tncncccc actgantagg gttagactgg acaggcttaa actaattcca	420
attggntaat ttaaagagaa tnatggggtg aatgctttgg gaggagtcaa ggaagagnag	480
gtagnaggta acttgaatga	500

<210> 70
 <211> 435
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(435)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 70	
ctgcagagta attgcaactg gagttgtctt aagataatgt cacatatcca tcttcccctt	60
gtttctcatt cacagaaaaa catttttatt ccagggtcca atattcccag caaaaagac	120
tttacttctg actcccttat atttaggatg gctatgagaa caagtaaggg caatgacttc	180
tagggagatg tgttgtgtat ggaacttcta aggagagaat tctgctgaca tgtcctatgt	240
tcttttctcc cctactcctt cctactgtca gaaatgaagg ctagggctcc agcctggacc	300
ctgaagtaag ctagaggtta gaagctaaag aagaaagaag gagattgagt ccttgatga	360
acgtgaagcc accctactaa tctggactgn ctacctctgn actactctat gagagagaaa	420
gtatgtgcat tttt	435

<210> 71
 <211> 439
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(439)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 71
catgctcttt gtccctgtga ctctctgcat ggtggtggc gtggntacca ttaagtcagt 60
cagcttttat acccggaagg atgggcagct gtacgtatga gtttggtttt attattctca 120
aagccagtgt ggcttttctt tacagcatgt catcatcacc ttgaaggcct ctgcattgaa 180
ggggcatgac ttagctggag agccatcct ctgtgatggc caggagcagt tgagagagcg 240
aggggttatt acttcatgtt ttaagtggag aaaaggaaca ctgcagaagt atgtttcctg 300
tatggtatta ctggataggg ctgaagttat gctgaattga acacataaat tcttttccac 360
ctcaggggca ttgggcgcc attgntcttc tgcctagaat attctttcct tttnctnactt 420
ggnggatta aattcctgt 439

<210> 72
<211> 318
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(318)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 72
tccatctcta cgactctcat ggggtccaaa gaagagtttt aattgagttt tagaatgtgn 60
agttgtgaag tgtctgaaaa actacatggt gntctgaaag ncaaactttt agccttgggg 120
gagagcatct aagacagnag gtgaagggga ggggttgan ctagagggat tgaagaatat 180
tatccatata ggtaggggtt aggtgtggca acgttttata gaacaaacat tggnaagcta 240
cagacacagg ccagntctgt ctntacctn tccacaaagg tgnataaca aagttannca 300
caaatgtgtg aataaact 318

<210> 73
<211> 450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(450)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 73
gttgcaaagt catggattcc tttaggtagc tacattatca acctttttga gaataaaatg 60

aattgagagt gttacagtct aattctatat cacatgtaac ttttatttgg atatatcagt	120
aatagtgcctt tttcnttttt tttttttntt ttttttnntt ttnggggana gagtctcgct	180
ctgtcgccag gttggagtgc aatggtgcga tcttggtcca ctgaaagctc caccncccgg	240
gttcaagtga ttctcctgcc tcagccnccc aagtagntgg gactacaggg gtgcgccacc	300
acgcctggga taattttggg ntttttagta gagatggcgt ttcaccanct tggngcaggc	360
tggtcttgga actcctgana tcatgatctg cctgccttag cctccccaaa gtgctgggat	420
tncaggggtg agccactgtt cctgggcctc	450

<210> 74
 <211> 489
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)..(489)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 74	
ctgcagntga gccgtgattg canccacttt actccnagcc tgggcaanca aaatgagaca	60
ctggctncaa acacaaaaaac aaaaacaaaa aaagagtaaa ttaatttaaa gggaagtatt	120
aaataaataa tagcacagtt gatatagggt atggtaaaat tataaagggt ggatattaat	180
atctaattgt tgggagccat cacattattc taaataatgt tttggtggaa attattgtac	240
atcttttaaa atctgtgtaa ttttttttca gggaagtgtt taaaacctat aacgttgctg	300
tggactacat tactgttgca ctctgatct ggaattttgg tgtggtggga atgatttcca	360
ttcactggaa aggtccactt cgactccagc aggcatactt cattatgatt agtgcctca	420
tggccctggt gtttatcaag taccnccctg aatggactgg gtggctcatc ttggctgtga	480
tttcagtat	489

<210> 75
 <211> 449
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)..(449)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 75
 ctgcagnctt gacctcctgg gatcaatcga tcctcccacc tcagcctcct aagtagctgg 60
 aactacaggt gtgcaccacc atgcccggct aatttttgta ttttctgtag atacgaggtt 120
 ttgccatgtt gcccaggctg gtcttgaact ctgggcttag gtgatctgcc cgcctcagcc 180
 tcccaaagtg ctaagattac aggcatgagc taccatgccc agccgaaatc ttcaaatgaa 240
 aaagttacta tagctaatta atgatttact gaagagttat gggatgtaca cgttaccatt 300
 ttctctaaat caagataaag agatgaggaa agaaaacact ccagtggggc attcctgtga 360
 caa'acaaatt atcagtcttg ggttttacna tatactgaaa tcacagccaa gatgagccac 420
 gcagtccatt cagggaggta cttgataaa 449

<210> 76
 <211> 490
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(490)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 76
 ttcttgccgt tcccgacctg agcctgggtg cccttcccca ttatgatcct tntcgcttcc 60
 ggcggcatcg ggatgccccg cgttgcaggc catnctgtcc cagncaggta gatgacgacc 120
 atcagggaca gcttcaagga tcgctcgcgg ctcttaccag cctaacttcg atcattggac 180
 cgctgatcgt cacggcgatt tatcccgctt cggcgagcac atggaacggg ttggcatgga 240
 ttgtaggcgc cgccctatac cttgtctgcc tccccgcgtg tgcgtcgcgg tgcattggagc 300
 cggncacact cgacctgaat ggaanccggc ggcacctcgc taacggattc accactccaa 360
 gaattggagc caatcaattc ttgcggagaa ctgtgaatgc ncaaaccaac ccttggcaga 420
 acatatccat cgcgtccgcc atctccanca gccgcacgcg gcgcatctcg ggcagcggtg 480
 ggtcctgcag 490

<210> 77
 <211> 470
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(470)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 77

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ctgcagtgtt taaaaaataa aataaactaa aagtttattt atgaggagta cactgctttc      60
ttgtaaacac atgtacaagc catataatag agttcatttc nnaccctagt tacggaaaca      120
ctagaaagtc tncacccggc caagataaca catcttttagg taaaaatagc aagaaatatt      180
ttatgggttg ttactttaa tcatagtttt caggttgggc acagtggntc atgcctgtaa      240
tcccagcact ttatgcggtt gaggcaggca gatcagttga ggtcagaagt ttgagaccag      300
cctgggcaat gtggcaaaac ctcatctcca ctaaaaatac aaaaattagc caggcatggt      360
ggtgcacaca tgttaattcc cagctacttg ggaggnttga gacaggaggg tcgcttggnc      420
ctaggaggga agaagttgna gggancttaa tgtcactgca ctctagnttg      470
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<210> 78

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(445)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 78

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cactcaattc tgaatgctgc catcatgata agtgtcattg ttgtcatgac tannctcctg      60
gtggttctgt ataaatacag gtgctataag gtgagcatga gacacagatc tttgntttcc      120
accctgttct tcttatgggt gggatttctt gtcacagtaa cttaactgat ctaggaaaga      180
aaaaatgttt tgtcttctag agataagtta attttttagtt ttcttctctc tcaactgtgga      240
acattcaaaa aatacaaaaa ggaagccagg tgcattgtgta atgccaggct cagaggctga      300
ggcaggagga tcgcttgggc ccaggagttc acaagcagct tgggcaacgt agcaagacct      360
tgctcttatt aaagaaaaca aaaaacaaat attggaagta ttttatatgc atggaatcta      420
tatgtcatga aaaaattagt gtaaa      445
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<210> 79

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(496)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 79

cctgtatttta tactgaacca ccaggaggat agtcatgact acaatgacnc tgatcatgat	60
ggcagcattc agaattgagt gcagggctct ctggcccaca gtctcggtat cttctgtgaa	120
tggggatatag attctacaat aaaacaaaca caaaagccct aggtcagtgt taatggagat	180
caccaaccac attaccacct ccaacacaga attttctttt tcttaattca attcgnatct	240
tataagtcac ttttcccaa ctcaccaatn ctagctaaga atttttaacc tgagaaaaac	300
agctacactc taaaattgct tcaaagaaaa tgtctaacat atggaaagaa ggacttaaca	360
tgtgaagcag aactggctc catctagtgg gtgctttata ttgaaataat tataatacct	420
catcaaattt tttngggtac agnttattag gaacttggtg tggaaccaga ttctgccaca	480
gaaaccacgn gggctg	496

<210> 80

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(496)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 80

cattagataa tggntcaggg tggccaaggc tccgtctgtc gttgtgctcc tgccgttctc	60
tattgtcatt ctataagcac aagaaaaaca ttttcagtaa atcagattct cagcagaatc	120
aaggtaacgg ttagacctgg gattaacaac agaccctca ctatgagttc taaaaacctg	180
aagcaagaaa aaacaatgta caggaagtat gcagtttaaa agtctagatt atctatcatt	240
gttcactgaa ggcattcagg tcctctcttt tacctgggtc ttggnntgct ccattctctc	300
tgttcatccc aacatacaca attgtactta tcctttgaga tgtaccttaa atactgacac	360
ctgcatgaaa acttggttac tggctgcagg tccaagcacc tttttcnaaa ttcagctttc	420
tgtgatttca gaccacatat gcaaggaact atcttacctt aattaataag antttaaaat	480
ccttgtgtca gaggcg	496

<210> 81

<211> 368

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(368)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 81
aggancgctt gggcccagga gttcacaagc agcttgggca acgtagcaag accctgcctc 60
tattaaagaa aacaaaaaac aaatattgga agtattttat atgcatggaa tctatatgtc 120
atgaaaaaat tagtgtaaaa tatatatatt atgattagnt atcaagattt agtgataatt 180
tatgttatnn ngggatttca atgccttttt aggccattgt ctcaaaaaat aaaagcagaa 240
aacaaaaaaa gttgttaactg aaaaataaac atttccatat aatagcacia tctaagtggg 300
tttttgnttg tttgtttgnt tgttgaagca gggccttgcc ctncaccca ggntggagtg 360
aagtgcag 368

<210> 82
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(500)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 82
gaattccttt tttttttttt tttttttttt ttntccttaa tgtttttatt gtnctttaga 60
taactggata gnacaaagtt ngnccttngtt ttttacttaa aaaacgtact ttccgcatac 120
tgtngcccgat atgactttcc tgtcccatcg gaaaccagag tttcccagag tgagcccttc 180
ctatctgngg ntacatgatt tagctaattt aacaagaaga gagtaattcc ttnggattat 240
tatcaacatg aaacttggac tatgtctcta taagggtgaa cactgatttt ttttttcttt 300
ttagaaacia aaaccatcca cttattaatc caaactacgg gattggattt acaacaatca 360
tcgcatnaac tgaacatacg aagttaccac tcaagggaat nacagaagaa cggtgnacia 420
tntntcttac ggggtacng aattcaaaca atgtggggan aggaacttca ntctacaaan 480
tctgaccatc gnttcagtat 500

<210> 83

<211> 450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(450)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 83
gaattccttt actcttcttt aattctaccg tctttgggca tacatctcat ttgntgtgga 60
agaaggtctg acagnagggc tgacagcacc gattcataac acattctttt catcatacaa 120
agagtaagac cctagaataa tgggaccatc tgctaccacg acagagctgc cttactggct 180
gtagaaaaag actgcttgtg tgggagagaa gaatgaggac agaggaggca tctggggcaa 240
gtgagcgtac aagtatntct acaaattcag aatttgggtg aaaatccaaa tttgncttca 300
acatgataga gaattgatga gaaaatagct gtntctgtttc caaaatttac tgaatttggg 360
aacctgaggt taaaactttt aggatnaagc aactcaggtt caagacttng nctngggaag 420
gaatggaaac acagacggga atgagnttca 450

<210> 84
<211> 450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(450)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 84
caactgtatt tatacagnaa ccaccaggag gatagtcatg acaacaatga caaactagga 60
atagccccct ttcacttctg agtcccagag gttacccaag gcacccctct gacatccggc 120
ctgcttcttc tcacatgana aaaactagcc cccagtntga tccgcaggtn gaggaatncc 180
ccgggtcgag gttcggatcc tggatgacag accctctcgc ccctgaaggn gataaccggg 240
tgtggtacat ggacggntat cacaacaacc gcttcgnacg tgagtacaag tccatgggtg 300
acttcatgaa cacggacaat ttcacctccc accgtctccc ccacccctgg tcgggcacgg 360
gggaggtggt ctncaacggt tctttctnct tcaacaagtt ccagagccac atcatcatca 420
ggtttggacc tgaaganaga gaacatcctc 450

<210> 85
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(500)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 85
ggatccctcc ccttttttaga ccatacaagg taacttccgg acgttgccat ggcatctgta 60
aactgtcatg gtgttggcgg ggagtgtctt ttagcatgct aatgtattat aattagcgta 120
tagtgagcag tgaggataac cagaggtcac tctcctcacc atcttggttt tgggtgggttt 180
tggccagctt ctttattgca accagtttta tcagcaagat ctttatgagc tgtatcttgt 240
gctgacttcc tatctcatcc cgtaactaag agtacctaac ctctgcaaa tngcagccca 300
gtaggtcttg gncttatttt acccagcccc tattcaagat agagttgctc ntgggtccaaa 360
cgctctgac acaaggattt taaagtctta ttaattaagg taagataggt ccttg gatat 420
gtgggtctgaa atcacagaaa gctgaatttg gaaaaagggtg cttggagctg cagccagtaa 480
acaagttttc atgcagggtgt 500

<210> 86
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(500)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 86
ctgcagtgag ccaaaatcgt gccactgcac ttactccag cctgggtgac agggcaaggc 60
cctgcttcaa caaacaaca aacaaacaaa aaccactta gattgtgcta ttatatggaa 120
atgtttattt ttcagttaca actttttttg ttttctgctt ttatttggtg agacaatggc 180
ctaaaaaggc attgaaatnc caaaataaca taaattatca ctaaatcttg ataactaatc 240
ataatatata tattttacac taattttttc atgacatata gattccatgc atataaaata 300
cttccaatat ttgttttttg ttttctttaa tagaggcagg gtcttgctac gttgccaag 360
ctgcttggtga actcctgggc ccaagcgatc ctctgcctc agcctctgag cctggcatta 420

cacatgcacc tggcttcctt tttgtntttt ttgaatgttc cacagtgagg aggaagaaaa	480
ctnaaaatta acttatctct	500

<210> 87
 <211> 450
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(450)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 87	
ctgcagatga gaggcactaa ttataagcca tattaccttt cttctgacaa ccacttgtca	60
gccacagtgg tttctgtggc agaatctggg tctataacaa gttcctaata agctgtagcc	120
aaaaaaattt gatgaggtat tataattatt tcaatataaa gcaccacta gatggagcca	180
gtgtctgctt cacatgttaa gtccttcttt ccatatgtta gacatcttct ttgaagcaat	240
tttagagtgt agctgttttt ctcaggtaa aaattcttag ctaggattgg tgagttgggg	300
aaaagtgact tataagatac gaattgaatt aagaaaaaga aaattctgtg ttggaggtgg	360
taatgtgggt ggtgatcttc attaacactg anctagggnt ttggggtttg gtttattgta	420
gaatctatac cccattcana gaagataccg	450

<210> 88
 <211> 502
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(502)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 88	
ctgcagccag taaacaagtt ttcatgcagg tgtcagtatt taaggtacat ctcaaaggat	60
aagtacaatt gtgtatgttg ggatgaacag agagaatgga gcaagccaag acccaggtaa	120
aagagaggac ctgaatgcct tcagtgaaca atgatagata atctagactt ttaaactgca	180
tacttcctgt acattgtttt ttcttgcttc aggttttttag aactcatagt gacgggtctg	240
ttgttaatcc caggtctaac cgttaccttg attctgctga gaatctgatt tactgaaaat	300
gtttttcttg tgcttataga atgacaatag agaacggcag gagcacaacg acagacggag	360

ccttggccac cctgagccat tatctaattg acgacccagg gtaactcccg gcaggtggtg	420
gagcaagatg aggaagaaga tgaggagctg acattgaaat atggcggcna gcatgtgatc	480
atgctcnttg gccctgtgan tc	502

<210> 89
 <211> 499
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(499)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 89	
ctgcagtgtt ccttttctcc acttaaaaca tgaagtaata acccctcgnt ctctcaactg	60
ctcctgacca tcacagagga tgggctctcc agctaagtca tgccccttca atgnagaggc	120
cttcaagggtg atgatgacat gctgtaaaga aaagccacac tgggtttgag aataataaaa	180
caaaactcat acgtacagct gcccatcctt ccgggtataa aagctgactg acttaatggt	240
agccacgacc accaccatgc agagagtcac agggacaaag agcatgatca catgcttggc	300
gncatatttc aatgtcagnt cctcatcttc ttctctatct tgntccacca cctgccggga	360
gttacnttgg gtcgtccatt agataatggg tcagggtggc caaggctccg tctgtcgttg	420
tgctcctgcc gttctctatt gtcattctat aagcacaaga aaaacatttn cagtaaataca	480
gatnctcagc agaatcaag	499

<210> 90
 <211> 500
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(500)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 90	
taactcccag gntcaagatn tctnctgcg ttagcctcct gagtagctgg gactataggt	60
atgtgccact attoctgaaa acataatcag ttttgaagggt agtgtctggg ctgggcgcag	120
tggnctacgc cttcaatccc agcacttttg gaggnccagg tgggcggatc acctgaggtc	180

aggagttcga gaccagcctg accaacaatgg gataagactc catctctact aaaaatacaa	240
aaaattagcc aggcattggtg gngcatgcct gtaatcccag ctactcagga ggntgaggna	300
ggagaattgg ttggaacctg ggaagcagag gctgtggtgg agccgagatc gcaccattgg	360
actccaggct gggnaacaag agtgaaaatc cntcttaaaa aaaaaaaaaa aaaggtagng	420
ttttgnccgg ngcggggggt cacgcctgta atcccagnat tgggganggc aaggnggggg	480
gtcannangn nagnagtccg	500

<210> 91
 <211> 502
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(502)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 91	
gaattctgct gacatgtcct atgttctttt ctcccctact ccttcctact gtcagnaatg	60
aagggtaggg ctccagcctg gaccctgaag taagctagag gttagaagct aaagaagaaa	120
gaaggagatt gagtccttng atgaacgtga agccaccgta ctaatctgga ctgcctacct	180
ctgcactact ctatgagaga gaaagtatgt gcattattta aaccagttgg gttgattttc	240
tattaacaaa gtcagaaaca tctctgtaaa aagccagact gaatatttta agctctatgg	300
gtcatatggt ctccagggca aacactcaac tgtgctactg tagtgtgaaa gcaggcacag	360
acaatgtatt aaccaaggag ggtgggtcact ttccaatgaa agtttatcac aaattggnga	420
atacttggtg ttacaccnng ggggaaggta ggagaagatc ttgcctgtgg ttgtngntgg	480
caatgttggt cttttatacg ng	502

<210> 92
 <211> 495
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(495)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 92	
gaattctctc cttagaagtt ccatacacia cacatctccc tagaagtcac tgccttact	60

tggttcata gccatcctaa atataaggga gtcagaagta aagtctggnt ggctgggaat	120
attggcacct ggaataaaaa tggttttctg tgaatgagaa acaaggggaa gatggatatg	180
tgacattatc ttaagacaac tccagttgca attactctgc agatgagagg cactaattat	240
aagccatatt acctttcttc tgacaaccac ttgtcagccc acgtggtttc tgtggcagaa	300
tctggttcta taacaagttc ctaataagct gtagccaaaa aaatttgatg aggtattata	360
attatttcaa tataaagcac ccactagatg gagccagtgt ctgcttcaca tgtaagtcc	420
ttctttccat atggttagaca tttctttgaa gcaattttag agtgtagctg tttctcaggt	480
taaaattctt agtag	495

<210> 93
 <211> 500
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(500)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 93	
tatggttgcc tattcttgtc acagtaactn aactgatcta ggaaagaaaa aatgttttgt	60
cttctagaga taagttaatt tttagttttc ttcctcctca ctgtggaaca ttcaaaaaat	120
acaaaaagga agccagggtgc atgtgtaatg ccaggctcag aggctgaggc aggaggatcg	180
cttgggcccc ggagttcaca agcagcttgg gcaacgtagc aagaccctgc ctctattaaa	240
gaaaacaaaa aacaaatatt ggaagtattt tatatgcatg gaatctatat gtcatgaaaa	300
aattagtgtg aaatatatat attatgatta gttatcaaga tttagtata atttatgtta	360
ttttgggatt tcaatgcctt tttaggccat tgtctcaaaa aaataaaaagc aggaaaacaa	420
aaaaagttgt aacttgaaaa ataaacattt ccatatttat agccaactaa gtgggtttng	480
ggtnggttg gttggttggt	500

<210> 94
 <211> 385
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(385)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 94

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ttatcattaa caggtccac aacccttaaa aagtacagat ttttttttc ttngtggaga      60
cagggctctca cttggctgcc cagactggag tgcagtggca cgatctcagt tcaccacaac    120
ctctgcctcc tgggttcaag caatnctcgt gcttaagcct cctgagtagg tggaaccacg    180
cgtgcgcgcc accacgctag gtttattgtg gcttttttag tagagacagg gtttcgccat    240
gttgcccagg ctggtctcan attccngacc tcaagtgatc cgnccgcctc agactcccaa    300
agtntgagc attacagntg tgtaccacta tgtccngnc cncatctctc tttaaaacan    360
cttncattta cctagtccac tcctg                                           385
```

<210> 95

<211> 330

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(330)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 95

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gacctagaaa agaaagcatt tcaanntaat taacaggtcc cacaaccctt aaaaagtaca      60
gatttttttt ttcttttngg agacagggtc tcactttgtc gccagactg gagtgcagtg    120
gcacgatctc agctcaccac ancctctgcc tcctgggttc aagnanttct cgtgcttang    180
cctcctgagt aggtggaacc acgcgtgtgc gccaccacgc taggctactt tntgtatttt    240
tagtagagac agggtttcgc catnttgccc aggtgntct caaattcctg acccncaagt    300
gatcccccn cttcagtag tccccatcag                                         330
```

<210> 96

<211> 382

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(382)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 96

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ggtggncgtt ctagaactag tggcncccaa ggnagaagaa gttttcttag tacagaacaa      60
```

aatgaaangt ctcccatgtc tacttctttc tacacagaca cggcatccat ccgtttttct	120
cantctttcc nccacctttc ccgtctttct attccacaaa gccgncattg tcatcctggc	180
ccntttctcaa tgagctgttg nntacacctc ccagacggcg tggtggnccg tcagaggggc	240
tcctcacttc ccagtagggg tggccngca gnggtgcc cncaccccc gggcggggtg	300
gttngtcnn ccgngggnt gcacncccc caccctccc cncctcnc ta ctggcggtcg	360
tntattncan natctttaag ca	382

<210> 97
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(360)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 97	
ggatccaaag gaagttagag gccagctcag tctacacctg ctactgntca gtgccacccc	60
ggtcaaggga gaccaacaca tggtaaaggc caagggttc ttggaaggca gtcagcagcc	120
tgtgcaagat gttctccaca ctgctcagnt taaggggagc tgggggcagg acctcagctg	180
gnatctctgc ttcaccagtg tccaggggtt gcacaattct tgtttactcg taggatattt	240
aatcttggnn ggtgctatca taaatgggac ttatccnctn attatgtttt cttactagtt	300
gtttatgtga aggttattga tttgggtttc actttatttn gtggnaatgg agtttcactc	360

<210> 98
 <211> 208
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(208)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 98	
aatgtcacgg attcctttag gtagntacac ccatcaacct ttttgagaat aaaatgaatt	60
gagagtgtta cagtctaatt ctatatcaca tgtaactttt atttgatat atcagtaata	120
gtgctttttt tttttttttt tttttttttt ttttttttng gnganagagt ctcgctctgt	180

cgccaggttg gagtgnaatg gtgcgac

208

<210> 99
<211> 470
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(470)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 99
aacaaggttt ctcggtcggc ggtgaatata ccggggcgctc gatatttggt gcggaatact 60
cccctgaccg taaacgtggc tttatgggca gctggctgga cttcggttct attgccgggt 120
ttgtgctggg tgcgggcgtg gtggtgttaa tttcgaccat tgtcggcgaa gcgaacttcc 180
tcgattgggg ctggcgatt ccgttcttta tcgctctgcc gttagggatt atcgggcttt 240
acctgcgcca tgcgctggaa gagactccgg cgttccagca gnatgtcgat aaactggaac 300
agggcgaccg tgaaggtttg gaggatggcc cgaaagtctc gtttaaagag attggcacta 360
aatactggng cagnctgttg aatgtttggg cttggttaatt ggcaaccaac gtgattacta 420
natgttggtg acctatattg ccgagttatt ggcgataac ctgaattatc 470

<210> 100
<211> 440
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(440)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 100
taattatatt gaaatgcttc tcntctaggt catccatgnc tggnttatta tatcatctct 60
attgntgntg ctctttttta catncattta cttggggtaa gttgtgaaat ttgggggtctg 120
tctttcagaa ttaactacct nngtgctgtg tagctatcat ttaaagccat gtactttgnt 180
gatgaattac tctgaagttt taattgtntc cacatatagg tcatacttgg tatataaaag 240
actagncagt attactaatt gagacattct tctgtngctc ctngcttata ataagtagaa 300
ctgaaagnaa ctttaagacta cagttaattc taagcctttg gggaaggatt atatagcctt 360
ctagtaggaa gtcttgtgcn atcagaatgt ttntaaagaa aggggtntcaa ggaatngtat 420

aaanaccaaa aataattgat

440

<210> 101
<211> 449
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(449)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 101
aaaacaaagc ctcttgaggt tctgaaaagg gaaagaaaaa cagaactttg tgcactacaa 60
ttatactggt ataaaaaaca cttccataga ttacattaag cagaaacaaa cttttctttc 120
atgtgttctc ctccaggcca agctgtctaa ggaccgcaaa ggctgttgct acttgcaggc 180
tcccagatta ggtctgaaat aggatttcac caggatcatcc attgttagtt aaatcctagt 240
aaattcattt anaccaatca aataactata agaccaattt gtaaaccagg aatgtattaa 300
tttgtcacga ctttcaacta actgacaaat ttactataag ctcaaggtag gactctttag 360
caataagtag gaaccgctg agacaaccaa acattttcaa cccacaaang atactttaat 420
gactttctga tttncagca aaagggggg 449

<210> 102
<211> 425
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(425)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 102
ggatccgccc tcctcggect cccaaagtgt tgggattaca ggcgtgagcc accgcacctg 60
gctttttttt tttttttttt tggnggagac agagtcttac tctgttgccc aagctggagt 120
gcagtgggtgc aatcttggtt cactgnaacc tccacctcca gagttcaagc aattctctgc 180
ctcagtttct ggagtagctg ggattacagg tgccctgcat cagcctggc taaatttggn 240
attttttttt agtagagaca gggtttcacc atgttgacca ggctgggtctt gaactcctga 300
ccttgtgatc caccagcctc ggccctccaa attgntggga ttacaggcgt gagccaccac 360

aaccaggcta aagttttaaa acatgccaaag tgtatttaca taatgcgata cganttatgt 420
acata 425

<210> 103
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(386)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 103
ggatccgccc gccttggcct cccaaagtgc tgggattaca ggcagagcc accgctcctg 60
gctgagtcctg cgatttcttg ccagctctac ccagttgtgt catcttaagc aagtcactga 120
acttctctgg attcccttct cctnttgtaa aataagcatg ttatctgtcc nncctgcctt 180
gggcattgtg ataaggataa gatgacatta tagaatntng caaaattaaa agcgctagac 240
aaatgatttt atgaaaatat aaagattagn ttgagtttgg gccagcatag aaaaaggaat 300
gttgagaaca ttcnttaag gattactcaa gctccctttg gtgtatatca gnngtcanna 360
cntatcttng gggctgaaaa atgttt 386

<210> 104
<211> 224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(224)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 104
gaaaagggaa agaaaaacag aactttgtgc actacaatta tactgttata aaaaacactt 60
ccatagatta cattaagcag aaacaaacct ttctttcatg tgttctctc caggccaagc 120
tgtctaagga ccgcaaaggc tgttgctact tgcaggctcc cagattaggt ctgaaatagg 180
atttcaccag gtcattccatt gttagttaaa tcctagtaaa tnca 224

<210> 105
<211> 440
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(440)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 105
ggatccgccc tctcggcct cccaaagtgt tgggattaca ggcgtgagcc accgcacctg 60
gctttttttt tttttttttt tggnggagac agagtcttac tctgttgccc aagctggagt 120
gcagtgggtgc aatcttggtt cactgcaacc tccacctcca gagttcaagc aattctctgc 180
ctcagtttct ggagtagctg ggattacagg tgcctgccat cacgcctggn taaatttggg 240
attttttttt agtagagaca gggtttcanc atgttggcca ggntggctct ggactcctga 300
cctggtgaac caccaggctc gggctccaaa tttggttggg attacagggg gtnaanacaac 360
cacaaccag nctaaagttt tnaaaacatn caaagtgtt taaaatnatg ngatacgatt 420
tattgtacaa ttaattttat 440

<210> 106
<211> 448
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(448)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 106
gtctttccca tcttctccac agagtttgtg cttacatta ttactccttg ccattttcaa 60
gaaagcattg tcagctcttc caatctccat cacctttggg ctgttttct actttgccac 120
agattatctt gtacagcctt ttatggacca attagcattc catcaatttt atatctagca 180
tatttgcggn tagaatccca tggatgttct ttctttgact ataacaaaat ctggggagga 240
caaagtgat tttcctgtgt ccacatctaa caaagtcaag atccccggct ggacttttgg 300
aggttccttc caagtcttcc tgaccacctt gcactattgg actttgnaa ggaggtgcct 360
atagaaaacg attttgaac atacttcac gcagggggac tgtgtccccc ggtggcagaa 420
nctaccaaga tttgcgggnc gaggtcaa 448

<210> 107
<211> 198
<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(198)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 107

ggatccgccc gccttggcct cccaaagtgc tgggattaca ggcatgagcc accgctcctg 60

gctgagtcctg cgatttcttg ccagctctac ccagttgtgt catcttaagc aagtcactga 120

acttctctgg attcccttct ccttnagtaa aataagnatg ttatctgncc gccctgcctn 180

ggnnattgng ataaggat 198

<210> 108

<211> 500

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(500)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 108

ctgcagtgag ccgtgattgc accactttac tccagcctgg gcaacaaaat gagaccctgg 60

ctcaaaaaca aaaacaaaaa caaaaaaaga gttaaattaat ttaaaggga gtattaaata 120

aataatagca cagttgatat aggttatggt aaaattataa aggtgggata ttaatatcta 180

atgtttggga gccatcacat tattctaaat aatgtnttgg tgaaaattat tgtacatctt 240

ttaaaatctg tgtaattttt tttcagggaa gtgttttaaaa cctataacgt tgctgtggac 300

tacattactg ttgcactcct gatctggaat tttgggtgtg gtgggaatga tttccattca 360

ctggaaagggt ccacttcgac tccagcaggc atatctcatt atgattagtg cctcatggnc 420

ctggtgttta tcaaagtacc tccctgaatg gactgcgtgg gtcaccttgg ntgtgattca 480

gtatatggta aaaccaaga 500

<210> 109

<211> 500

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(500)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 109

ctgcagcctt gacctcctgg gatcaatcga tcctcccacc tcagcctcct aagtagctgg	60
aactacaggt gtgcaccacc atgcccggct aatngntgta ttttctgtag atacgaggtg	120
tngccatggt gccagggctg gtcttgaact ctgggcttag gtgatctgcc cgcctcagcc	180
tcccaaagtg ctaagattac aggcattgagc taccatgcc agccgaaatc ttcaaataaa	240
aaagttacta tagctaatta atgatttact gaagagttat gggatgtaca cgttaccatt	300
ttctctaaat caagataaag agatgaggaa agaaaacact ccagtggggc attcctgtga	360
caaaacaaat tatcagtcctt ggggtttnac catatactga aatcacaggc aagatgagcc	420
acgcagtcga tncagggagg tactggataa caccagggnc atgagggact aatcataatg	480
agatatgctg ctggagtcga	500

<210> 110

<211> 550

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(550)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 110

ctgcaggatg agagcgatct cttnttncat ttctgctgct acgcgctgcg ggcgacaaaa	60
ttctttcgcc ataataaatt ctctgacna aaaaggggct gttagcccct ttttaaaatt	120
aatttcaggt ggaagggctg ttcacgttga cctgataaga cgcgccagcg tcacatcagg	180
caatccatgc cggatgcagc gtaaagcctt tatcccgcat ggaaccctaa aaaccttaag	240
caatggtagc ttggatctcg atgatttcga atacttcgat cacatcgna gtgcggacgt	300
cgttgtagtt cttaacgcg ataccacatt ccataccgtt acgggacttc gttaacgtca	360
tctttggaag cggggcaggg actccagctc gnttcgtag ataaccacgt tggcacgcag	420
gaacgcgggt cgggttgtga cgtttaacac aacttcggg taaccataca ggctgngatg	480
gnaccaaatt tcgggggatt tggacaagtc aagaacttcc cgccagaccg ataattctgt	540
tggtcagttc	550

<210> 111

<211> 541
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(541)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 111
ctgcagcttt cctttaaact aggaagactt gttcctatac cccagtaacg atacactgta 60
cactaagcaa atagcagtca aacccaaatg aaatttntac agatgttctg tgtcatttta 120
tnttgtttat gttgtctccc ccacccccac cagttcacct gccatttatt tcatattcat 180
tcaacgtctn nntgtgtaaa aagagacaaa aaacattaaa cttttttcct tcgttaattc 240
ctccctacca cccatttaca agtttagccc atacatttta ttagatgtct tttatgtttt 300
tcttttncta gatttagtgg ctgngttgtg tccgaaaggt ccacttcgta ttgctgggtg 360
aaacagctca ggagagaaat gaaacgcttt ttccagctct catttactcc tgtaagtatt 420
tggaagaatga tattgaatta gtaatcagng tagaatttat cgggaacttg aaganatgtn 480
actatggcaa tttcanggna cttgtctcat cttaaatan agnatccctg gactcctgna 540
g 541

<210> 112
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(241)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 112
nncccnncn nnnnnnttn ntnttgcccg ataactatag ggngacttgg agatccaccg 60
cgggtggcgn cgntctagaa ctagtggatc ccccgggntg caggacccaa cgctgcccga 120
gatgcgccgc gtgcggttgc tggagatggc ggacgcgatg gatatgttct gccaaggggt 180
ggtttgcgca ttcacagttc tccgcaagaa ttgattggct ccaattcttg gagtggtgaa 240
t 241

<210> 113
<211> 834

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(834)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 113
ccccccncc nnnnnttttn ngcagcccggt aattaccctc actnccggga acaaaagctg 60
ggtaccgggc cccccctcga ggtcgacggt atcgataagc ttgatatcga attcctgcag 120
tgttttaaaaa ataaaataaa ctaaaagttt atttatgagg agtacactgc tttcttgtaa 180
acacatgtac aagccatata atagagttca ttttttacc tagttacgga aacactagaa 240
agtcttcacc cggccaagat aacacatctt tagtaaaaat agcaagaaat attttatggg 300
ttgtttactt aaatcatagt tttcaggttg ggcacagtgg ntcatgcctg taatcccagc 360
actttatgcg gntgaggcag gcagatcagt tgaggtcaga agtttggaga ccagnctggg 420
caatgtggna aaacctcatc tccactaaaa atacaaaaat tagncaggca tggtggtgca 480
cacatgtaat tccagntact tggggaggct gagacaggag gatcgnttga acctagggag 540
ggaggagtgt gagtgagcta atgtcaatgc actcttggtt ggggcganag agcaagatct 600
ttcttccaaa aaaaaaaaaa aaaaaaaagc caggtgnngn ggtcaaggct gtaatccaga 660
attngggagg ccngggagggn natcantgng gnaggngtca agnggggcn ggcacatggg 720
gaaccgcgttn ttnttaaatn aaaattagcc gggngggggg aggactntat ccngttccgg 780
nggtgnnggag gatcnttatt ntggnggagg gtggatgnnc cagttgacnc cccc 834

<210> 114
<211> 838
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(838)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 114
ttgggcncnc gcccttaan tttttatngn ttntctanaaa aanannnggc ncntaaaaat 60
atatTTTTTn ttgtgacccc ttttaaaagg gaccnctaa aaaattttnt ggtnnttttn 120
gatttangtg ggtgnTTTTn ttatatTTTT ggngagnntc tgtagtcntc nccctcaaac 180

anntcntacn atnggnancg tgactctgtc nttngtnann ntcgntntcn ngtnattcna	240
ggnnccctcgc gcnnncncggg cnnngttttt tttnnncnntt tttaagccna annctcagta	300
ncntccaacg gngctnngac annngnnnct ntcgngggtn ccctctntnt ngnnncnnggc	360
tnnnngnnnc ngncngcngn gccntgcggn nngnnngngg nnnngntnca tanggatngn	420
gntgctcnc ncnnnggttn tnagtaggna nttttntnt acttgccnnc nnntngctgc	480
gagnanagcn anntngnngn agngnngtg cgcgganntt ccctgatna nctcgagcng	540
nttacnggng cnnctngaa naagngngt anngtgccga gncgctannc tgagcctgag	600
tntcgacngg natngtgnt cntacngtta ngggnggcnn gancgggntg antcnccggn	660
ngancnagcg actgcctntc angcgaancg tntcangnnn gtagagcana gggtnannng	720
tcnnnnaagc nttnagtgan tgtcntnacn ngtganttac ggcntagnct tgatntnnan	780
ncgaggnnnn atnnannntt ggananttnn tnnntcncn tcgcgngng ncnngccg	838

<210> 115
 <211> 803
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(803)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 115	
attcgcggt agcccgataa ctatagggcg acntggagnt ccaccgcggt ggcggccgct	60
ctagnaacta gtggatcccc cgggctgcag gaattcacgg actaatcctc tacagatctt	120
gctggagtgg cctttcagcc ttttgtgact gtttgtagt aaatgtacac acaagcctac	180
aaggcagccc agatgtacca taactgtggg aaaattaaaa aaaaaaaaaac acagaacctc	240
tctatgttgc ccatgctgga ctcaaactct tagacaagca atcctcgtac ctcagcctcc	300
tgagttcctg agtagctggg actacaagca tgcaccacca tgccaggcta tgagaaagtt	360
ctttttattg atccagacct tattgctgg taacttcac cactgttct agctctgntc	420
tctggtccta acagaggaaa atcttgaccc cacacctagt gcaactggat agcttatngt	480
tgggctngtg tttcctctat tctgggtcca ccctaaaatc cnatagatac tccaactgct	540
canagnaaac caagctctct ctctnncttn ctttcttnnn ctctattnat tnatgggna	600
tnattnattn nggggatggn gttcggctgc cgcccggtg gngtgaaatg ggggaggcaa	660

tcaatttaac cccacccngg gtccagggat ctcgttnaaa ccgnnnnnnnn nnnnnnnnnna	720
ngnnncnncnc nnnccnntnn nnnnggtttnn nngnnnnngg nnnccnnnnn nnnnnnnntn	780
nnnccnccna nnnntncnnnn ccc	803

<210> 116
 <211> 780
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(780)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 116	
cnnnnnnncc cnnntattnt acgccagccg cgtaattaac cctcactaaa gggaacaaaa	60
gctgggtacc gggccccccc tcgaggtcga cggtatcgat aagcttgata tcgaattcca	120
actcctcact tgccagatgt gaccttaagc aagtgaactt ctgtgtgcca cactgttttc	180
atctgtaaaa ggataaaggg aatatcataa attagnttgt taagccttag tttaataatg	240
tctctaagtt ttacatataa gtagacagtg tctttcttgt ttagtgaata atcattctta	300
ttatttaata gtatctctac taaatttatt gtgtaagatt atactaatct tgtttagtgc	360
gtggtaatca cttctgctca tatttaacct ataagcataa tatagtttat ttatatacca	420
nttatttatt ttattttatt tgnngagatg cagcttgtct tttncaaccc agggntgngg	480
nagnagnng naancttgnt tcaactgnaac cncaccncc caggtncaaag ngattctcct	540
gntcaagccn cctnagnagn tgggnattaca gnacgantac annccagnta nnnnggntnt	600
nngntngnna ggnnncacan nngncaggt nntcgnctcc nngccanrna ctnnnnccan	660
ccccnnngnn nnnnatanag natnancann nncncnnnn ncnnnnnnng gngganncn	720
nntngcngnn annngnann nntnnnnnnn nnggncnng nnnnnnnncc nnnnnncccc	780

<210> 117
 <211> 803
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(803)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 117
 nnnnnnnnnnc cnnnnnnnttc gnnnctaacn cgantcacta tagggcgact tggagctcca 60
 ccgcggtggc ggccgctcta gaactagtgg atccccggg ctgcaggaat tcgatatcaa 120
 gctttngtgt gtaaaaagta ttagaatctc atgtttttga acaagggttg cagtgggttg 180
 ggaggaggga ttggagattg atgcgatagg aatgtgaagg gatagcttgg ggtggatttt 240
 attttttaat ttttaattttt atttnttgag atggagtctt gctctgtctc ccaggctgga 300
 gtgcagtggg gtgatctcag ctacagggtt caagcgattc tcctgctgca gcctcccag 360
 tagctgggat tacaggagcg cgccaccaca cccggnntaat ttnnttgat ttttagtaga 420
 gacgggggtt caccatgttg gttaggctgg tctagaactc ccaacctcat gatccgcctg 480
 cttcggcctc ccaaagtgcc ggaattacag gcgtgagcga ctgcacccgg ccgcttgggg 540
 gtggattttt aaagaaattt agaagaatgt aacttgcca gataccatgt acccgtaat 600
 tcatttncgg ttttttgat acccattttg nnattctccc nccactggat aaataagggn 660
 ggttcattnt ngnttagttt gggtnntttt nagtgtggnt tctgcttatn attagaatgg 720
 nctnctttnc caanctggaa agggaggagt taaaatcant accagaanca gaaattcttt 780
 tcanttggtg cncnagaaat gcc 803

<210> 118
 <211> 819
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(819)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 118
 tnccnnnnn nnnnnaattt tngcagncgc gtaattaacc tcactaaagg gaacaaaagc 60
 tgggtaccgg gccccccctc gaggtcgacg gtatcgataa gttccctcc ccttcctcag 120
 ctctggcgac cctgcgctgt ggtggttctc caaccacact cattctctc agctggctcc 180
 ttgctcttct tccacccctt cgttggaagt gttcctaagt gtttggttg gcctcctctt 240
 ccccttcctt agnttagact tctccactgc tccaacatca actggaaatc tatggaattg 300
 attcctgttt tcagctccag tcctgttcac agggcatttt cacctgctgg cacttccaaa 360
 gtgacacttc caaacactt cctcgccctc ctctctaaac caggtctttc ttcctaactt 420
 ccttatttct gagaatgtct ctgncatgtt ctaaactgaa aactcctagt caactncaca 480

ctttattccc tggatcctca attgggttcc catgtncctg tagtgtttct tggtaagnct	540
ctgccancac cgnaggatcg actctaataca catctcaact gaattatggn aaagtcaact	600
caattctctc aaccatccca ggctccacta tggntaatat gctaaggaga gctgacccaa	660
cggggagaag atctgnnggg gaggagagaa acaaagntaa tggaatnatt ctcgaaaagc	720
ccacaaggng aaggataacc cncctccnct cgaaagaggg gggatcgcca gatntcgcgc	780
ccggaaagaa accggggnga ggggggttaca ntgtaagnc	819

<210> 119
 <211> 796
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(796)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 119	
tnntggctgg tactgcttga gcaactggtg aaactccgcg cctcacgccc cgggtgtgtc	60
cttgtccagg ggcgacgagc attctgggcg aagtccgcac gcctcttggt cgaggcggaa	120
gacggggtct gatgctttct ccttggtcgg gactgtctcg aggcatgcat gtccagtgc	180
tcttggtgtt gctgctgctt ccctctcaga ttcttctcac cgttgtgggc agctctgctt	240
taggcatatt aatccatagt ggaggctggg atgggtgaga gaattgaggt gacttttcca	300
taattcaggt gagatgtgat tagagttcga tctgcggtgg tggcagaggc ttacaagaaa	360
cactaacggg acatgggaac caattgagga tcagggaata aagtgtgaag ttgactagga	420
ggttttcagt ttagaacatg gcagagacat tctcagaaat aaggaagtta ggaagaaaga	480
ctggttttaga gaggagggcg angaagtggg ttgggaagtg tcactttggg aagtgccagc	540
aggtgaaaat gcctgtgaca ggatggagct gaaaacagga tcaattccat agattccagt	600
tgatgtngga gcaggggaga agtcttagct aaggaagggg aagaggaggc caaggnaaca	660
cttaggacaa ttgnaacgan ggggggggag aagagnaagg gccacttagg ggaataatnt	720
ggtgggggac ccccaagnna gggcgcannt ttaggagggg ggganntcan aggaaagtgg	780
aagnttgggt ttanct	796

<210> 120
 <211> 802

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(802)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 120
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gcaggggccg gncctttgtg gccgcccggg ccgcgaagcc ggtgtcctaa aagatgaggg 120
gcggggcgcg gncggttggg gctggggaac cccgtgtggg aaaccaggag gggcgggccc 180
tttctcgggc ttcgggcgcg gccgggtgga gagagattcc ggggagcctt ggtccggaaa 240
tgctgtttgc tcgaagacgt ctacgggcgc aggtgccttg ggccgggatt agtagccgtc 300
tgaactggag tggagtagga gaaagaggaa gcgtcttggg ctgggtctgc ttgagcaact 360
ggtgaaactc cgcgccctcac gccccgggtg tgccttgtc caggggcgac gagcattctg 420
ggcgaagtcc gcacgcctct tgttcgaggc ggaagacggg gtcttgatgc tttctccttg 480
ggtcggggac tgtctcgagg catgcatgtc cagtgaactct tgtgtttggt gntgcttccc 540
tctcagatct tctaccgng gtgggcaact ctgtttaggc atattatcca tagnggagggc 600
tggatggttg aaanaattga ggnattttc cataatcaag tgaaatttga tagagtccgn 660
ctttnggggt gnaagggtta aaaaaaata acggaaatgg aacaatgagg tcaaggatta 720
gttgagttgn tagnggttca attaganatg aaggnatcta aaataggagt agagaannng 780
ttnaaagagg gaaaattttg cc 802

<210> 121
<211> 793
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(793)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 121
atatgcagcc gcgtaattaa cctcactaaa gggaacaaaa gctgggtacc gggccccccc 60
tcgaggtcga cggtatcgat aagcttgata tcgaattcct gcagcccggg ggatccgccc 120
cgcgccctcc caaagtgtg ggattacagg cgtgagccac cgccccgggn ctcacatttt 180

atttctattg gctagcgctg ctctaaatct tctgttcctt ctgctacacc aggcctaaca	240
ctcaaaatcc ctgccaacct tttccttctt gaagcttccc tccccttctt cagctctggc	300
gacctgctgc tgtggtggtt ctccaaccac actcattctc ctgagctggc tccttgctct	360
tcttccaccc cctcgntgga agtggttcta agtgtttggc ttggcctcct cttccccttc	420
cttagcttag acttctccac tgctccaaca tcaactggaa atctatggaa ttgattcctg	480
tttcagctcc agtcctgttc acaggggatt ttcanctggg ggcatttcca aagtgaatt	540
ccaaaccact tcctcggcct cctcttctaa ancaggtctt tcttcctaac ttccttattc	600
ttgagaatgt ctctgcatgt tcttaaatg aaaactccta gtcaaattca aatttatccc	660
tgatcccaaa tgggtccatt cccgtagggg ttntgtagcc tgcacaccga ggtcggantt	720
tatnnattca ccgattatgg aaagtaacca atcttnacca nccagctcat ttgttntntg	780
ctaagagggt ncc	793

<210> 122
 <211> 440
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(440)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 122	
aaagtcattg attccttttag gtagctacat tatcaacctt ttgagaata aaatgaattg	60
agagtgttac agtctaattc tatatcacat gtaactttta ttggatata tcagtaatag	120
tgttttttcn tttttttttt ttnttttttt tnnttttngg gganagagtc tcgctctgtc	180
gccaggttgg agtgcaatgg tgcgatcttg gctcactgaa agctccaccn cccgggttca	240
agtgattctc ctgcctcagc cncccaagta gntgggacta caggggtgcg ccaccacgcc	300
tgggataatt ttgggnnttt tagtagagat ggcgtttcac cancttgng caggctggtc	360
ttggaactcc tganatcatg atctgcctgc cttagcctcc ccaaagtgtc gggattncag	420
gggtgagcca ctgttcctgg	440

<210> 123
 <211> 453
 <212> DNA
 <213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(453)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 123
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tcttaatgtc aaaactttga ttacacagtc cctttaaggc agttctgttt taaccccagg 120
tggggttaaat attccagcta tctgaggagc ttttngataa ttggacctca ccttagtagt 180
tctctaccct ggccacacat tagaatcact tgggagcttt taaaactgta agctctgccc 240
tgagatatctt ttactcaatt taattgtgta gtttttaaaa ttcccagga aattctggta 300
tttctgttta ggaaccgctg cctcaagcct agcagnacag atatgtagga aattagctct 360
gtaagggttg tcttacaggg gataaacaga tccttcctta gncctggga cttaatcact 420
gagagtttgg gtggngggtt ngnatttaat gac 453

<210> 124
<211> 369
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(369)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 124
gacacacatt cacacataat tatgaaagca ttttcaggca aaactcaatc acaagtctgg 60
gtttttaaca tagttaactg aatatttccc ttgggggggtt aaattttaga acagacgtnc 120
atncaatctg gaagaagagc tatgaaaaaa acctagcttg ggtnggtttc atagggtnca 180
ttatgnacac attgttattt tatcccttaa tnctagtaaa gaaatagaat ctgaaaataa 240
gtaaaactac ttggaaaaaa nttaaaagat acagaaattt ctatcttaaa tgatgtgtgg 300
gccnctgtga ttttagtngg gntgggttaa ancccagagg tgaagagnat nctctatgct 360
gtgngggggg 369

<210> 125
<211> 516
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)..(516)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 125
gctcatcatg cttcacgggg gaggctgtgc gggaagaatg ctccacacaca gnataaagaa 60
tgctcccgca caggatagag aatgcccccg cacagcatag agaagcccc gcacagcata 120
gagaatgccc ccncacagca tagagaagcc cccgcacagc atagagaatg ctcttcacct 180
ctgggtttttt aaccagccaa actaaaatca cagaggscma cacatcattt aagatagaaa 240
tttctgtatc ttttaattty tttcmaagta gttttactta ttttcagatt ctatttcttt 300
actagaatta agggataaaa taacaatgtg tgcataatga accctatgaa acmaacmmaa 360
gctaggtttt tttcatagst cttcttcag attgaatgaa cgtctgttct aaaatttaac 420
ccccaggga aatattcagt taactatgtt aaaaaccag acttgtgatt gagttttgcc 480
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<210> 126
<211> 121
<212> DNA
<213> Homo sapiens

<400> 126
gtataatgca ggtgctataa ggtgagcatg agacacagat ctttgctttc caccctgttc 60
ttcttatggt tgggtattct tgtcacagta acttaactga tctaggaaag aaaaaatgtt 120
t 121

<210> 127
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 127
tgagactgg aacacaac 18

<210> 128
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 128
gtgtggccag ggtagagaac t 21

<210> 129
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide primer

<400> 129
atctccggca ggcataatct 19

<210> 130
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 130
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<210> 131
<211> 19
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<213> Artificial Sequence

<220>
<223> primer

<400> 131
ccatagcctg tttcgtagc 19

<210> 132
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 132
ccatagccta tttcgtagc 19

<210> 133
<211> 2792
<212> DNA
<213> Homo sapiens

<400> 133

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ctgggagcct gcaagtgaca acagcctttg cggtccttag acagcttggc ctggaggaga	180
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ccatcacctt tgggcttgtt ttctactttg ccacagatta tcttgtacag ccttttatgg	1620
accaattagc attccatcaa ttttatatct agcatatttg cggttagaat cccatggatg	1680

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gaagcaaaaa aaaaaaaaaa aaaaaaaaaa aa 2792

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<210> 134
<211> 467
<212> PRT
<213> Homo sapiens

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<400> 134

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1           5           10           15

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Ser Glu Asp Asn His Leu Ser Asn Thr Val Arg Ser Gln Asn Asp Asn
20           25           30

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Arg Glu Arg Gln Glu His Asn Asp Arg Arg Ser Leu Gly His Pro Glu
35           40           45

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Pro Leu Ser Asn Gly Arg Pro Gln Gly Asn Ser Arg Gln Val Val Glu
50 55 60

Gln Asp Glu Glu Glu Asp Glu Glu Leu Thr Leu Lys Tyr Gly Ala Lys
65 70 75 80

His Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val
85 90 95

Val Ala Thr Ile Lys Ser Val Ser Phe Tyr Thr Arg Lys Asp Gly Gln
100 105 110

Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr Glu Thr Val Gly Gln Arg
115 120 125

Ala Leu His Ser Ile Leu Asn Ala Ala Ile Met Ile Ser Val Ile Val
130 135 140

Val Met Thr Ile Leu Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys
145 150 155 160

Val Ile His Ala Trp Leu Ile Ile Ser Ser Leu Leu Leu Leu Phe Phe
165 170 175

Phe Ser Phe Ile Tyr Leu Gly Glu Val Phe Lys Thr Tyr Asn Val Ala
180 185 190

Val Asp Tyr Ile Thr Val Ala Leu Leu Ile Trp Asn Phe Gly Val Val
195 200 205

Gly Met Ile Ser Ile His Trp Lys Gly Pro Leu Arg Leu Gln Gln Ala
210 215 220

Tyr Leu Ile Met Ile Ser Ala Leu Met Ala Leu Val Phe Ile Lys Tyr
225 230 235 240

Leu Pro Glu Trp Thr Ala Trp Leu Ile Leu Ala Val Ile Ser Val Tyr
245 250 255

Asp Leu Val Ala Val Leu Cys Pro Lys Gly Pro Leu Arg Met Leu Val
260 265 270

Glu Thr Ala Gln Glu Arg Asn Glu Thr Leu Phe Pro Ala Leu Ile Tyr
275 280 285

Ser Ser Thr Met Val Trp Leu Val Asn Met Ala Glu Gly Asp Pro Glu
290 295 300

Ala Gln Arg Arg Val Ser Lys Asn Ser Lys Tyr Asn Ala Glu Ser Thr
305 310 315 320

Glu Arg Glu Ser Gln Asp Thr Val Ala Glu Asn Asp Asp Gly Gly Phe
325 330 335

Ser Glu Glu Trp Glu Ala Gln Arg Asp Ser His Leu Gly Pro His Arg
340 345 350

Ser Thr Pro Glu Ser Arg Ala Ala Val Gln Glu Leu Ser Ser Ser Ile
355 360 365

Leu Ala Gly Glu Asp Pro Glu Glu Arg Gly Val Lys Leu Gly Leu Gly
370 375 380

Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala Ser Ala Thr Ala
385 390 395 400

Ser Gly Asp Trp Asn Thr Thr Ile Ala Cys Phe Val Ala Ile Leu Ile
405 410 415

Gly Leu Cys Leu Thr Leu Leu Leu Leu Ala Ile Phe Lys Lys Ala Leu
420 425 430

Pro Ala Leu Pro Ile Ser Ile Thr Phe Gly Leu Val Phe Tyr Phe Ala
435 440 445

Thr Asp Tyr Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln
450 455 460

Phe Tyr Ile
465

<210> 135
<211> 1964
<212> DNA
<213> Mus musculus

<220>

<221> misc_feature

<222> (1)..(1964)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 135

accanacanc	ggcagctgag	gcggaacct	aggctgcgag	ccggccgccc	gggcgcggag	60
agagaaggaa	ccaacacaag	acagcagccc	ttcgaggtct	ttaggcagct	tggaggagaa	120
cacatgagag	aaagaatccc	aagaggtttt	gttttctttg	agaaggattt	tctgtccagc	180
tgctccaatg	acagagatac	ctgcaccttt	gtcctacttc	cagaatgccc	agatgtctga	240
ggacagccac	tccagcagcg	ccatccggag	ccagaatgac	agccaagaac	ggcagcagca	300
gcatgacagg	cagagacttg	acaacctga	gccaatatct	aatgggcggc	cccagagtaa	360
ctcaagacag	gtggtggaac	aagatgagga	ggaagacgaa	gagctgacat	tgaaatatgg	420
agccaagcat	gtcatcatgc	tctttgtccc	cgtgaccttc	tgcattggtc	tcgtcgtggc	480
caccatcaaa	tcagtcagct	tctatacccg	gaaggacggt	cagctaattt	acaccccatt	540
cacagaagac	actgagactg	taggccaaag	agccctgcac	tcgatcctga	atgcggccat	600
catgatcagt	gtcattgtca	ttagtaccat	cctcctggtg	gtcctgtata	aatacaggtg	660
ctacaaggtc	atccacgcct	ggcttattat	ttcatctctg	ttgttgctgt	tctttttttc	720
gttcattttac	ttaggggaag	tatttaagac	ctacaatgtc	gccgtggact	acgttacagt	780
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ccttcgactg	cagcaggcgt	atctcattat	gatcagtgcc	ctcatggccc	tggattttat	900
caagtacctc	cccgaatgga	ccgcatggct	catcttggtc	gtgatttcag	tatatgattt	960
ggtggctgtt	ttatgtccca	aaggcccact	tcgtatgctg	gttgaaacag	ctcaggaaaag	1020
aaatgagact	ctctttccag	ctcttatcta	ttcctcaaca	atggtgtggt	tggatgaatat	1080
ggctgaagga	gacccagaag	cccaaaggag	ggtacccaag	aacccaagt	ataacacaca	1140
aagagcggag	agagagacac	aggacagtgg	ttctgggaac	gatgatggtg	gcttcagtga	1200
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agctgctgtc	caggaaacttt	ctgggagcat	tctaacgagt	gaagaccggg	aggaaagagg	1320
agtaaaactt	ggactgggag	atttcatttt	ctacagtgtt	ctggttggtg	aggcctcagc	1380
aaccgccagt	ggagactgga	acacaacct	agcctgcttt	gtagccatac	tgatcggcct	1440
gtgccttaca	ttactcctgc	tcgccatttt	caagaaagcg	ttgccagccc	tccccatctc	1500

catcaccttc gggctcgtgt tctacttcgc cacggattac cttgtgcagc ctttcattgga 1560
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ccaacatcca tcgctgcagc agacgggtgtc cctcagtgc ttgagagaca aggacaagga 1860
aatgtgctgg gccaaaggagc tgccgtgctc tgctagcttt gaccgtgggc atggagattt 1920
accgcactg tgaactctct aaggtaaaca aagtgaggtg aacc 1964

<210> 136
<211> 467
<212> PRT
<213> Mus musculus

<220>
<221> MISC_FEATURE
<222> (1)..(467)
<223> where X is unknown or other

<400> 136

Met Thr Glu Ile Pro Ala Pro Leu Ser Tyr Phe Gln Asn Ala Gln Met
1 5 10 15

Ser Glu Asp Ser His Ser Ser Ser Ala Ile Arg Ser Gln Asn Asp Ser
20 25 30

Gln Glu Arg Gln Gln Gln His Asp Arg Gln Arg Leu Asp Asn Pro Glu
35 40 45

Pro Ile Ser Asn Gly Arg Pro Gln Ser Asn Ser Arg Gln Val Val Glu
50 55 60

Gln Asp Glu Glu Glu Asp Glu Glu Leu Thr Leu Lys Tyr Gly Ala Lys
65 70 75 80

His Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val
85 90 95

Val Ala Thr Ile Lys Ser Val Ser Phe Tyr Thr Arg Lys Asp Gly Gln
100 105 110

Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr Glu Thr Val Gly Gln Arg
115 120 125

Ala Leu His Ser Ile Leu Asn Ala Ala Ile Met Ile Ser Val Ile Val
130 135 140

Ile Met Thr Ile Leu Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys
145 150 155 160

Val Ile His Ala Trp Leu Ile Ile Ser Ser Leu Leu Leu Leu Phe Phe
165 170 175

Phe Ser Phe Ile Tyr Leu Gly Glu Val Phe Lys Thr Tyr Asn Val Xaa
180 185 190

Val Asp Tyr Val Thr Val Ala Leu Leu Ile Trp Asn Trp Gly Val Val
195 200 205

Gly Met Ile Ala Ile His Trp Lys Gly Pro Leu Arg Leu Gln Gln Ala
210 215 220

Tyr Leu Ile Met Ile Ser Ala Leu Met Ala Leu Val Phe Ile Lys Tyr
225 230 235 240

Leu Pro Glu Trp Thr Ala Trp Leu Ile Leu Ala Val Ile Ser Val Tyr
245 250 255

Asp Leu Val Ala Val Leu Cys Pro Lys Gly Pro Leu Arg Met Leu Val
260 265 270

Glu Thr Ala Gln Glu Arg Asn Glu Thr Leu Phe Pro Ala Leu Ile Tyr
275 280 285

Ser Ser Thr Met Val Trp Leu Val Asn Met Ala Glu Gly Asp Pro Glu
290 295 300

Ala Gln Arg Arg Val Pro Lys Asn Pro Lys Tyr Asn Thr Gln Arg Ala
305 310 315 320

Glu Arg Glu Thr Gln Asp Ser Gly Ser Gly Asn Asp Asp Gly Gly Phe
325 330 335

Ser Glu Glu Trp Glu Ala Gln Arg Asp Ser His Leu Gly Pro His Arg
340 345 350

Ser Thr Pro Glu Ser Arg Ala Ala Val Gln Glu Leu Ser Gly Ser Ile
355 360 365

Leu Thr Ser Glu Asp Pro Glu Glu Arg Gly Val Lys Leu Gly Leu Gly
370 375 380

Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala Ser Ala Thr Ala
385 390 395 400

Ser Gly Asp Trp Asn Thr Thr Ile Ala Cys Xaa Val Ala Ile Leu Ile
405 410 415

Gly Leu Cys Leu Xaa Leu Leu Leu Leu Ala Ile Tyr Lys Lys Gly Xaa
420 425 430

Pro Ala Xaa Pro Ile Ser Ile Thr Phe Gly Phe Val Phe Xaa Phe Ala
435 440 445

Thr Asp Tyr Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln
450 455 460

Phe Tyr Ile
465

<210> 137
<211> 2285
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)..(2285)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 137
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tgaaggaacc tgagacagaa gctagtcccc cctctgaatt ttactgatga agaaactgag 120
gccacagagc taaagtgact tttcccaagg tcgccagcg aggacgtggg acttctcaga 180
cgtcaggaga gtgatgtgag ggagctgtgt gaccatagaa agtgacgtgt taaaaaccag 240

cgtgcctc	tttgaaagcc	aggagcattc	attcatttag	cctgctgaga	agaagaaacc	300
aagtgtccgg	gattcaagac	ctctctgcgg	ccccaaagtgt	tcgtggtgct	tccagaggca	360
gggctatgct	cacattcatg	gcctctgaca	gcgaggaaga	agtgtgtgat	gagcggacgt	420
ccctaattgtc	ggccgagagc	cccacgccgc	gctcctgcc	ggagggcagg	cagggcccag	480
aggatggaga	gaatactgcc	cagtggagaa	gccaggagaa	cgaggaggac	ggtgaggagg	540
accctgaccg	ctatgtctgt	agtgggggttc	ccgggcggcc	gccaggcctg	gaggaagagc	600
tgaccctcaa	atacggagcg	aagcatgtga	tcatgctgtt	tgtgcctgtc	actctgtgca	660
tgatcgtggt	ggtagccacc	atcaagtctg	tgcgcttcta	cacagagaag	aatggacagc	720
tcattctacac	gccattcact	gaggacacac	cctcggtggg	ccagcgcctc	ctcaactccg	780
tgtgaacac	cctcatcatg	atcagcgtca	tcgtggttat	gaccatcttc	ttggtggtgc	840
tctacaagta	ccgtgctac	aagttcatcc	atggctgggt	gatcatgtct	tactgatgc	900
tgtgtttcct	cttcacctat	atctaccttg	gggaagtgtc	caagacctac	aatgtggcca	960
tggactaccc	cacctcttg	ctgactgtct	ggaacttcgg	ggcagtgggc	atggtgtgca	1020
tccactggaa	gggccctctg	gtgctgcagc	aggcctacct	catcatgac	agtgcgctca	1080
tggccctagt	gttcattcaag	tacctccag	agtgggtccgc	gtgggtcacc	ctgggcgcca	1140
tctctgtgta	tgatctcgtg	gctgtgctgt	gtcccaaagg	gcctctgaga	atgctggtag	1200
aaactgccc	ggagagaaat	gagcccatat	tccctgccct	gatatactca	tctgccatgg	1260
tgtggacggt	tggcatggcg	aagctggacc	cctcctctca	gggtgccctc	cagctccct	1320
acgaccgga	gatggaagaa	gactcctatg	acagttttgg	ggagccttca	taccccgagg	1380
tctttgagcc	tcccttgact	ggctaccag	gggaggagct	ggaggaagag	gaggaaaggg	1440
gcgtgaagct	tggcctcggg	gacttcatct	tctacagtgt	gctggtgggc	aaggcggctg	1500
ccacgggcag	cggggactgg	aataccacgc	tggcctgctt	cgtggccacc	ctcattggct	1560
tgtgtctgac	cctcctgctg	cttgctgtgt	tcaagaaggc	gctgcccgcc	ctcccatct	1620
ccatcacgtt	cgggctcacc	ttttacttct	ccacggacaa	cctggtgcgg	ccgttcatgg	1680
acaccctggc	ctcccatcag	ctctacatct	gaggacatg	gtgtgccaca	ggctgcaagc	1740
tgcaggaat	tttcattgga	tgcagttgta	tagttttaca	ctctagtgcc	atatatTTTT	1800
aagacttttc	tttccttaaa	aaataaagta	cgtgtttact	tggtaggag	gaggcagaac	1860
cagctctttg	gtgccagctg	tttcatcacc	agactttggc	tcccgctttg	gggagcgcc	1920
cgtttcacgg	acaggaagca	cagcaggttt	atccagatga	actgagaagg	tcagattagg	1980

gtggggagaa gagcatccgg catgagggct gagatgccca aagagtgtgc tcgggagtgg 2040
 cccctggcac ctgggtgctc tggctggaga ggaaaagcca gttccctacg aggagtgttc 2100
 ccaatgcttt gtccatgatg tccttgttat tttattnccy ttanaaactg antcctnttn 2160
 ttnttdcggc agtcacmctn ctgggragtg gcttaatagt aanatcaata aanagntgag 2220
 tcctnttaga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2280
 aaaaaa 2285

<210> 138
 <211> 448
 <212> PRT
 <213> Homo sapiens

<400> 138

Met Leu Thr Phe Met Ala Ser Asp Ser Glu Glu Glu Val Cys Asp Glu
 1 5 10 15

Arg Thr Ser Leu Met Ser Ala Glu Ser Pro Thr Pro Arg Ser Cys Gln
 20 25 30

Glu Gly Arg Gln Gly Pro Glu Asp Gly Glu Asn Thr Ala Gln Trp Arg
 35 40 45

Ser Gln Glu Asn Glu Glu Asp Gly Glu Glu Asp Pro Asp Arg Tyr Val
 50 55 60

Cys Ser Gly Val Pro Gly Arg Pro Pro Gly Leu Glu Glu Glu Leu Thr
 65 70 75 80

Leu Lys Tyr Gly Ala Lys His Val Ile Met Leu Phe Val Pro Val Thr
 85 90 95

Leu Cys Met Ile Val Val Val Ala Thr Ile Lys Ser Val Arg Phe Tyr
 100 105 110

Thr Glu Lys Asn Gly Gln Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr
 115 120 125

Pro Ser Val Gly Gln Arg Leu Leu Asn Ser Val Leu Asn Thr Leu Ile
 130 135 140

Met Ile Ser Val Ile Val Val Met Thr Ile Phe Leu Val Val Leu Tyr
145 150 155 160

Lys Tyr Arg Cys Tyr Lys Phe Ile His Gly Trp Leu Ile Met Ser Ser
165 170 175

Leu Met Leu Leu Phe Leu Phe Thr Tyr Ile Tyr Leu Gly Glu Val Leu
180 185 190

Lys Thr Tyr Asn Val Ala Met Asp Tyr Pro Thr Leu Leu Leu Thr Val
195 200 205

Trp Asn Phe Gly Ala Val Gly Met Val Cys Ile His Trp Lys Gly Pro
210 215 220

Leu Val Leu Gln Gln Ala Tyr Leu Ile Met Ile Ser Ala Leu Met Ala
225 230 235 240

Leu Val Phe Ile Lys Tyr Leu Pro Glu Trp Ser Ala Trp Val Ile Leu
245 250 255

Gly Ala Ile Ser Val Tyr Asp Leu Val Ala Val Leu Cys Pro Lys Gly
260 265 270

Pro Leu Arg Met Leu Val Glu Thr Ala Gln Glu Arg Asn Glu Pro Ile
275 280 285

Phe Pro Ala Leu Ile Tyr Ser Ser Ala Met Val Trp Thr Val Gly Met
290 295 300

Ala Lys Leu Asp Pro Ser Ser Gln Gly Ala Leu Gln Leu Pro Tyr Asp
305 310 315 320

Pro Glu Met Glu Glu Asp Ser Tyr Asp Ser Phe Gly Glu Pro Ser Tyr
325 330 335

Pro Glu Val Phe Glu Pro Pro Leu Thr Gly Tyr Pro Gly Glu Glu Leu
340 345 350

Glu Glu Glu Glu Glu Arg Gly Val Lys Leu Gly Leu Gly Asp Phe Ile
355 360 365

Phe Tyr Ser Val Leu Val Gly Lys Ala Ala Ala Thr Gly Ser Gly Asp

370

375

380

Trp Asn Thr Thr Leu Ala Cys Phe Val Ala Ile Leu Ile Gly Leu Cys
 385 390 395 400

Leu Thr Leu Leu Leu Leu Ala Val Phe Lys Lys Ala Leu Pro Ala Leu
 405 410 415

Pro Ile Ser Ile Thr Phe Gly Leu Ile Phe Tyr Phe Ser Thr Asp Asn
 420 425 430

Leu Val Arg Pro Phe Met Asp Thr Leu Ala Ser His Gln Leu Tyr Ile
 435 440 445

<210> 139
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 139
 ggtaccgcga ccatgacaga ggtacctgca c

31

<210> 140
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 140
 gaattcactg gctgtagaaa aagac

25

<210> 141
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 141
 ggatccggtc cacttcgtat gctg

24

<210> 142
 <211> 33

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide primer

 <400> 142
 ttttttgaat tcttaggcta tggttgtgtt cca 33

<210> 143
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <400> 143
 gattagtggg tggtttgtg 19

<210> 144
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <400> 144
 gattagtggc tggtttgtg 19

<210> 145
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> primer

 <400> 145
 tttttccagc tctcattta 19

<210> 146
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> primer

 <400> 146
 tttttccagt tctcattta 19

<210> 147
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> primer

<400> 147
tacagtgttc tggttgta 19

<210> 148
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<400> 148
tacagtgttc tggttgta 19

<210> 149
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<400> 149
tacagtgttg tggttgta 19

<210> 150
<211> 1092
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1092)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 150
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cttaaagagt gagaaaaatt ttcccaggaa tcccgggtgga ctttgcttca ccactcatag 120
gttcatacca agttacaacc ccacaacctt agagcttttg ttaggaagag gcttggtggg 180
attaccgtgc ttggcttggc ttggtcagga ttcaccacca gagtcatgtg ggaggggggtg 240

ggaacccaaa caattcagga ttctgccctc aggaaataaa ggagaaaata gctgttggat	300
aaactaccag caggcactgc tacagcccat gctttgtggt ttaagggcca gctagttaca	360
atgacagcta gttactgttt ccatgtaatt ttcttaaagg tattaatttt ttctaaatat	420
tagagctgta acttccactt tctcttgaag gcacagwaag ggagtcacaa gacactgttg	480
cagagaatga tgatggcggg ttcagtgagg aatgggaasc ccagrgggac antcatctag	540
ggcctcatcg ctctacacct gagtacagag ctktntcca ggractttcc ancagtatcc	600
tcgctggtga agaccagag gaaagnatgt tcantttctcc atntttcaaa gtcattggatt	660
ccttttaggta gctacattat caaccttttt gagaataaaa tgaattgaga gtgttacagt	720
ctaattctat atcacatgta acttttattt ggatatatca gtaatagtgc ttttynntt	780
tttttttttt tttttttttt ttttngnga nagagtctcg ctctgtcgcc aggttggagt	840
gcaatggtgc gatcttggct cactgaaagc tccaccnccc gggttcaagt gattctctcg	900
cctcagcnc ccaagtagnt gggactacag ggggtcgcca ccacgcctgg gataattttg	960
ggnttttttag tagagatggc gtttcaccan cttggngcag gctggctctg gaactcctga	1020
natcatgac tgccctgcctt agcctcccca aagtgcctgg attncagggg tgagccactg	1080
ttcctgggcc tc	1092

<210> 151
 <211> 1003
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(1003)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 151	
ctgcagtgag ccgagatcat gctgctgtac tccagcctgg gccacagagc caaactccat	60
ctcccaaaaa aaaaaaatat taattaatat gatnaaatga tgccatcttc agaattcttg	120
taaggatttc ttagkacaag tgctgggtat aaactatana ttcragatg gncgattatt	180
acttaytatt gttattgata aataacagca gcactctacag ttaagactcc agagtcagtc	240
acatagaatc tggcnactcct attgtagnaa acccnmmag aaagaaaaca cagctgaagc	300
ctaattttgt atatcattta ctgacttctc tcattcattg tggggttgag tagggcagtg	360
atatttttga attgtgaaat catancaaag agtgaccaac tttttaatat ttgtaacctt	420

tccttttttag	ggggagtaaa	acttgattg	ggagatttca	ttttctacag	tgttctgggt	480
ggtaaagcct	cagcaacagc	cagtggagac	tggaacacaa	ccatagcctg	tttcgtagcc	540
atattaattg	tmmstataca	ctaataagaa	tgtgtcagag	ctcttaatgt	cmaaactttg	600
attacacagt	ccctttaagg	cagttctggt	ttaaccccag	gtgggttaaa	tattccagct	660
atctgaggag	cttttngata	attggacctc	accttagtag	ttctctaccc	tggccacaca	720
ttagaatcac	ttgggagctt	ttaaaactgt	aagctctgcc	ctgagatatt	cttactcaat	780
ttaattgtgt	agttttttaa	attccccagg	aaattctggt	atttctgttt	aggaaccgct	840
gcctcaagcc	tagcagcaca	gatatgtagg	aaattagctc	tgtaagggtg	gtcttacagg	900
gataaacaga	tccttcctta	gtccctggac	ttaatcactg	agagtttggg	tggtggtttt	960
ggattttaatg	acacaacctg	tagcatgcag	tgttacttaa	gac		1003

<210> 152
 <211> 1726
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(1726)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 152						
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aactgtcatg	gtgttggcgg	ggagtgtctt	ttagcatgct	aatgtattat	aattagcgta	120
tagtgagcag	tgaggataac	cagaggtcac	tctcctcacc	atcttggttt	tgggtgggttt	180
tggccagctt	ctttattgca	accagtttta	tcagcaagat	ctttatgagc	tgtatcttgt	240
gctgacttcc	tatctcatcc	cgnaactaag	agtacctaac	ctcctgcaaa	ttgmagncca	300
gnaggctctg	gncttatttn	accagcccc	tattcaarat	agagtngytc	ttggnccaaa	360
cgccyctgac	acaaggattt	taaagtctta	ttaattaagg	taagatagkt	ccttgsatat	420
gtggctctgaa	atcacagaaa	gctgaatttg	gaaaaagggtg	cttggasctg	cagccagtaa	480
acaagttttc	atgcagggtg	cagtatttaa	ggtacatctc	aaaggataag	tacaattgtg	540
tatgttggga	tgaacagaga	gaatggagca	anccaagacc	caggtaaaaag	agaggacctg	600
aatgccttca	gtgaacaatg	atagataatc	tagactttta	aactgcatac	ttcctgtaca	660
ttgttttttc	ttgcttcagg	tttttagaac	tcatagtgac	gggtctgttg	ttaatcccag	720

gtctaaccgt taccttgatt ctgctgagaa tctgatttac tgaaaatggt tttcttggtgc	780
ttatagaatg acaatagaga acggcaggag cacaacgaca gacggagcct tggccaccct	840
ganccattat ctaatggacg acccagggtta actcccggca ggtgggtggan caagatgagg	900
aagaagatga ggancgtgaca ttgaaatatg ncgscaagca tgtgatcatg ctctttgkcc	960
ctgtgactct ctgcatgggtg gtggctcgtgg ntaccattaa gtcagtcagc ttttataccc	1020
ggaaggatgg gcagctgtac gtatgagttt kgttttatta ttctcaaasc cagtgtggct	1080
tttctttaca gcatgtcatc atcaccttga aggcctctnc attgaagggg catgacttag	1140
ctggagagcc catcctctgt gatggtcagg agcagttgag agancgaggg gttattactt	1200
catgttttaa gtggagaaaa ggaacactgc agaagtatgt ttctgtatg gtattactgg	1260
atagggctga agttatgctg aattgaacac ataaattctt ttccacctca gggncattgg	1320
gagccattg ntcttctgcc tagaatattc tttcctttnc tnacttkggn ggattaaatt	1380
cctgtcatcc cctcctctt ggtgttatat ataaagtntt ggtgccgcaa aagaagtagc	1440
actcgaatat aaaattttcc ttttaattct cagcaaggna agttacttct atatagaagg	1500
gtgcaccnt acagatggaa caatggcaag cgcacatttg ggacaaggga ggggaaagg	1560
ttcttatccc tgacacacgt ggtccngct gntgtgtntc nccccactg antagggtta	1620
gactggacag gcttaaacta attccaattg gntaatttaa agagaatnat ggggtgaatg	1680
ctttgggagg .agtcaaggaa gagnaggtag naggttaactt gaatga	1726

<210> 153
 <211> 1883
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(1883)
 <223> where n may be either a or g or c or t/u, unknown or other

<400> 153	
cnegtataaa agaccaacat tgccancnac aaccacaggc aagatcttct cctaccttcc	60
cccnnggtgt aataccaagt attcnccaat ttgtgataaa ctttcattgg aaagtgacca	120
ccctccttgg ttaatacatt gtctgtgcct gctttcacac tacagtagca cagttgagtg	180
tttgccctgg agaccatatg acccatagag cttaaaatat tcagtctggc tttttacaga	240
gatgtttctg actttgttaa tagaaaatca acccaactgg tttaaataat gcacatactt	300

tctctctcat agagtagtgc agaggtagnc agtccagatt agtasggtgg cttcacgttc	360
atccaaggac tcaatctcct tctttcttct ttagcttcta acctctagct tacttcaggg	420
tccaggctgg agccctascc ttcatttctg acagtaggaa ggagtagggg agaaaagaac	480
ataggacatg tcagcagaat tctctcctta gaagttccat acacaacaca tctccctaga	540
agtcattgcc cttacttggt ctcatagcca tcctaaatat aagggagtca gaagtaaagt	600
ctkkntggct gggaatattg gcacctggaa taaaaatgtt tttctgtgaa tgagaaacaa	660
ggggaagatg gatatgtgac attatcttaa gacaactcca gttgcaatta ctctgcagat	720
gagaggcact aattataagc catattacct ttcttctgac aaccacttgt cagccncgt	780
ggtttctgtg gcagaatctg gttcyatamc aagttcctaa taanctgtas ccnaaaaaat	840
ttgatgaggt attataatta tttcaatata aagcaccac tagatggagc cagtgtctgc	900
ttcacatggt aagtccttct ttccatatgt tagacatttt ctttgaagca attttagagt	960
gtagctgttt ttctcaggtt aaaaattctt agctaggatt ggtgagttgg ggaaaagtga	1020
cttataagat ncgaattgaa ttaagaaaaa gaaaattctg tgttgagggt ggtaatgtgg	1080
ktggtgatct ycattaacac tganctaggg ctttkgkgtt tgktttattg tagaatctat	1140
acccattca nagaagatac cgagactgtg ggccagagag ccctgcactc aattctgaat	1200
gctgccatca tgatcagngt cattgtwgtc atgactannc tcctgggtgg tcwgtataaa	1260
tacaggtgct ataagggtgag catgagacac agatctttgn tttccaccct gttcttctta	1320
tggttgggta ttcttgtcac agtaacttaa ctgatctagg aaagaaaaaa tgttttgtct	1380
tctagagata agttaatttt tagttttctt cctcctcact gtggaacatt caaaaaatac	1440
aaaaaggaag ccaggtgcat gtgtaatgcc aggctcagag gctgaggcag gaggatcgct	1500
tgggcccagg agttcacaag cagcttgggc aacgtagcaa gaccctgcct ctattaaaga	1560
aaacaaaaaa caaatattgg aagtatttta tatgcatgga atctatatgt catgaaaaaa	1620
ttagtgtaaa atatatatat tatgattagn tatcaagatt tagtgataat ttatgttatt	1680
ttgggatttc aatgcctttt taggccattg tctcaamaaa taaaagcaga aaacaaaaaa	1740
agttgtaact gaaaaataaa catttcata taatagcaca atctaagtgg gtttttgntt	1800
gtttgtttgn ttgttgaagc agggccttgc cctnycacc aggntggagt gaagtgcagt	1860
ggcacgattt tggctcactg cag	1883

<210> 154
<211> 1990

<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(1990)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 154

atgtttgaca atttctccgt tccacccttg attaaataag gtagtattca ttttttaagt	60
tttagctttt ggatatatgt gtaagtgtgg tatgctgtct aatgaattaa gacaattggg	120
nctktcttta cccmacanct ggacmaagag caggcaagat ncaanaatca agtgaccag	180
ncaaaccaga cacattttct gctctcagct agcttgccac ctagaaagac tgggtgtcna	240
agttggagtc caagaatcgc ggaggatggt taaaatgcag tttctcaggt tctcnccacc	300
caccagaagt ttgattcat tgagtgggtg gagagggcag agatatttgc gattttaaca	360
gcattctctt gattgtgatg cagctgggtc scaaataggt accctaaaga aatgacaggt	420
gttaaattta ggatggccat cgcttgatg ccgggagaag cacacgctgg gcccaattta	480
tataggggct ttcgtcctca gctcgagcar cctcagaacc ccgacaaccy acgccagckc	540
tctgggcgga ttcrcctcagk tggggaagsc caggtggagc tctggkttct ccccgcaatc	600
gtttctccag gccggaggcc ccgccccctt cctcctggtt cctccccctc tccgtgggcc	660
gnccgccaac gacgccagag ccggaaatga cgacaacggt gagggttctc gggcggggcc	720
tgggacaggc agctccgggg tcncngnnwt nacatcgga acaaaacagc ggctggtctg	780
gaaggaacct gakctacgac ccgcggcggc agcggggcgg cggggaagcg tatgtgcgtg	840
atggggagtc cgggcaagcc aggaaggcac cgcgacatg ggcggccgcg ggcaggggcc	900
ggncctttgt ggccgcccgc gccgcgaagc cgggtgtccta aaagatgagg ggcggggcgc	960
ggccggttgg ggctggggaa ccccggtgtg gaaaccagga gggcgggccc gtttctcggg	1020
cttcgggcgc ggccgggtg agagagattc cggggagcct tgggtccgga atgctgtttg	1080
ctcgaagacg tctcagggcg caggtgcctt gggccgggat tagtagccgt ctgaactgga	1140
gtggagtagg agaaagagga agcgtcttgg gctgggtctg cttgagcaac tggtgaaact	1200
ccgcgcctca cgcgccgggt gtgtccttgt ccaggggcga cgagcattct gggcgaagtc	1260
cgcacgcctc ttgttcgagg cggaagacgg ggtcttgatg ctttctcctt ggtcgggact	1320
gtctcagagc atgcatgtcc agtgactctt gtgtttgctg ctgcttcctt ctcagattct	1380
tctcaccgtt gtggtcagct ctgctttagg catattaatc catagtggag gctgggatgg	1440

gtgagagaat	tgaggtgact	tttcataat	tcaggtgaga	tgtgattaga	gtycggatcc	1500
tncggtggtg	gcagaggctt	accaagaaac	actaacgga	catgggaacc	aattgaggat	1560
ccaggggaata	aagtgtgaag	ttgactagga	ggttttcagt	ttaagaacat	ggcagagaca	1620
ttctcagaaa	taaggaagtt	aggaagaaag	acctggttta	gagaggaggg	cgaggaagtg	1680
gtttggaagt	gtcacttttg	aagtgccagc	aggtgaaaat	gccctgtgaa	caggactgga	1740
gctgaaaaca	ggaatcaatt	ccatagattt	ccagttgatg	ttggagcagt	ggagaagtct	1800
aanctaagga	aggggaagag	gaggccaagc	caaacactta	ggaacacttn	cnacgagggg	1860
gtggaagaag	agcaaggagc	cagctgagga	gaatgagtgt	ggttgagaa	ccaccacagc	1920
ncagggtcgc	caganctgag	gaaggggagg	gaagcttatt	gagkamsgwc	racmkcgagt	1980
tggcagggat						1990

<210> 155
 <211> 736
 <212> DNA
 <213> Homo sapiens

<400> 155						
gtctttccca	tcttctccac	agagtttgtg	ccttacatta	ttactccttg	ccattttcaa	60
gaaagcattg	tcagctcttc	caatctccat	cacctttggg	cttgttttct	actttgccac	120
agattatctt	gtacagcctt	ttatggacca	attagcattc	catcaatttt	atatctagca	180
tatttgcggt	tagaatccca	tggtatgttc	ttctttgact	ataacaaaat	ctggggagga	240
caaaggtgat	ttcctgtgtc	cacatctaac	aatcaagat	ccccggctgg	acttttgag	300
gttccttcca	agtcttcttg	accaccttgc	actattggac	tttggaagga	ggtgcctata	360
gaaaacgatt	ttgaacatac	ttcatcgag	tggtactgtg	cctcggtgca	gaaactacca	420
gatttgaggg	acgaggtcaa	ggagatatga	taggcccgga	agttgctgtg	cccatcagc	480
agcttgacgc	gtggtcacag	gacgattttc	actgacactg	cgaactctca	ggactaccgt	540
taccaagagg	ttaggtgaag	tggttttaac	caaacggaac	tcttcatctt	aaactacacg	600
ttgaaaatca	accataaat	tctgtattaa	ctgaattctg	aacttttcag	gaggtactgt	660
gaggaagagc	aggcaccacc	agcagaatgg	ggaatggaga	ggtgggcagg	ggttcagct	720
tccctttgat	tttttg					736

<210> 156
 <211> 1117

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1117)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 156
ggatccgccc gccttggcct cccaaagtgc tgggattaca ggcatgagcc accgctcctg 60
gctgagtctg cgatttcttg ccagctctac ccagttgtgt catcttaagc aagtcactga 120
acttctctgg attcccttct cctnnwgtaa aataagnatg ttatctgncc nncctgcctt 180
gggcattgtg ataaggataa gatgacatta tagaatntng caaaattaaa agcgctagac 240
aaatgatttt atgaaaatat aaagattagn ttgagtttgg gccagcatag aaaaaggaat 300
gttgagaaca ttcnnttaag gattactcaa gcyccctttt tgstgknwaa tcaganngtc 360
atnnamntat cntntgtggg ytgaaaatgt ttggttgtct caggcggttc ctacttattg 420
ctaaagagtc ctaccttgag cttatagtaa atttgtcagt tagttgaaag tcgtgacaaa 480
ttaatacatt cctgggtttac aaattggtct tataagtatt tgattggtnt aaatgnattt 540
actaggattt aactaacaat ggatgacctg gtgaaatcct atttcagacc taatctggga 600
gcctgcaagt gacaacagcc tttgcggtcc ttagacagct tggcctggag gagaacacat 660
gaaagammgg tttgwntctg nttawtgtaa tctatgraag tgtttttwat macagtataa 720
ttgtmtgmac aaagtctctgt ttttctttcc ctttncagaa cctcaagagg ctttgttttc 780
tgtgaaacag tatttctata cagntgctcc aatgacagag tnacctgcac cgttgtccta 840
cttcagaat gcacagatgt ctgaggacaa ccacctgagc aatactgtac gtagccaggt 900
acagcgtcag tytctnaaac tgccyygnc agactggatt cacttatcat ctcccctcac 960
ctctgagaaa tgctgagggg gstaggnagg gctttctcta cttnaccaca tttnataatt 1020
atttttgggt gaccttcagc tgatcgctgg gagggacaca gggcttnttt aacacatagg 1080
gtgttgata cagnccctcc ctaattcaca tttcanc 1117

<210> 157
<211> 540
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(540)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 157

ctgcagcttt cctttaaact aggaagactt gttcctatac cccagtaacg atacactgta	60
cactaagcaa atagcagtca aacccaaatg aaatttntac agatgttctg tgtcatttta	120
tnttgtttat gttgtctccc ccacccccac cagttcacct gccatttatt tcatattcat	180
tcaacgtctn nntgtgtaaa aagagacaaa aaacattaaa cttttttcct tcgttaattc	240
ctccctacca cccatttaca agtttagccc atacatttta ttagatgtct tttatgtttt	300
tcttttncta gatttagtgg ctgtttngtg tccgaaaggc ccacttcgta tgctggttga	360
aacagctcag gagagaaatg aaacgctttt tccagctctc atttactcct gtaagtattt	420
ggagaatgat attgaattag taatcagngt agaatttatc gggaacttga aganatgtna	480
ctatggcaat ttcanggnac ttgtctcatc ttaaataana gnatccctgg actcctgnag	540

<210> 158

<211> 509

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(509)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 158

ccccgtcnat gcatactttg tgtgtccagt gcttacctgg aatccngtct ttcccaacag	60
caacaatggt gtggttggtg aatatggcag aaggagaccc ggaagctcaa aggagagtat	120
ccaaaaattc caagtataat gcagaaagta ggtaactyyy nntagatamn atcttgattt	180
tncagggtca ctgttataag ctaacagtat agnaatgttt ttatcgtctt tctnkgnca	240
tagactcctn kgagaatctc ttgagaacta tgataatgcc cagtaaatac ncagataagt	300
atttaaggag tncagatact caaancccaa caatacngtc aaagcatcct aggttaagac	360
amcncccatt aaatacagaa taccagcatg gaaagggtca ggctgagggt atgattgggt	420
ttgggttttg ggnnngtttt ttataagtca tgattttaaa aagaaaaaat aaactctctc	480
caaacatgta aaagtaagaa tctcctaaa	509

<210> 159

<211> 823

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(823)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 159

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caggagtgga ctaggtaaat gnaagntggt ttaaagagag atgnggncng ggacatagtg      60
gtacacanct gtaatgctca nactkatgg ggagtactga agngngnsgg atcacttgng      120
ggtcnggaat ntgagancag cctgggcaan atggcgaaac cctgtctcta ctaaaaatag      180
ccanaawnwa gcctagcgtg gtggcgcrca cgcggtgggtc cacctactca ggaggcntaa      240
gcacgagnan tncctgaacc caggaggcag agngtgtggt garctgagat cgtgccactg      300
cactccagtc tgggcgacma agtgagaccc tgtctcnnn aagaaaaaaa aaatctgtac      360
ttttaagggt ttgtgggacc tgtaattat attgaaatgc ttctyttcta ggtcatccat      420
gcctggctta ttatatcatc tctattgttg ctgctctttt ttacattcat ttacttgggg      480
taagttgtga aatttggggt ctgtctttca gaattaacta cctnngtgct gtgtagctat      540
catttaaagc catgtacttt gntgatgaat tactctgaag ttttaattgt ntccacatat      600
aggtcatact tggatatataa aagactagnc agtattacta attgagacat tcttctgtng      660
ctcctngctt ataataagta gaactgaaag naacttaaga ctacagttaa ttctaagcct      720
ttggggaagg attatatagc cttctagtag gaagtcttgt gcnatcagaa tgtttntaaa      780
gaaagggtnt caaggaatng tataaanacc aaaaataatt gat                          823
```

<210> 160

<211> 945

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(945)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 160

```
gtntccnaa ccaacttagg agnttggacc tgggraagac cnacntgatc tccgggaggn      60
aaagactnca gttgagccgt gattgcaccc actttactcc aagcctgggc aacccaaatg      120
agacactggc tccaaacaca aaaacaaaaa caaaaaaaga gtaaattaat ttanaggga      180
gnattaaata aataatagca cagttgatat aggttatggt aaaattataa aggtgggana      240
```

ttaatatcta atgtttggga gccatcacat tattctaaat aatgttttgg tggaaattat	300
tgtacatctt ttaaaatctg tgtaattttt tttcagggaa gtgttttaaaa cctataacgt	360
tgctgtggac tacattactg ttncactcct gatctggaat tttggtgtgg tgggaatgat	420
ttccattcac tggaaaggtc cacttcgact ccagcaggca tatctcatta tgattagtgc	480
cctcatgncc ctgktgttta tcaagtacct ccctgaatgg actgngtggc tcattcttggc	540
tgtgatttca gtatatggta aaaccaaga ctgataattt gtttgtcaca ggaatgcccc	600
actggagtgt tttctttcct catctcttta tcttgattta gagaaaatgg taacgtgtac	660
atcccataac tcttcagtaa atcattaatt agctatagta actttttcat ttgaagattt	720
cggctgggca tggtagctca tgcctgtaat cttagcactt tgggaggctg aggcgggcag	780
atcacctaag cccagagttc aagaccagcc tgggcaacat ggcaaaacct cgtatctaca	840
gaaaatacaa aaattagccg ggcattggtgg tgcacacctg tagttccagc tacttaggag	900
gctgaggtgg gaggatcgat tgatcccagg aggtcaagnc tgcag	945

<210> 161
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 161

Tyr Pro Thr Phe
 1

<210> 162
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 162

Ser Thr Pro Glu
 1

<210> 163
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 163

cattcactga ggacacacc

19

<210> 164
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 164
tgtagagcac caccaaga

18

<210> 165
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 165
gcatggtgtg catccact

18

<210> 166
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 166
ggaccactct gggaggta

18

<210> 167
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 167
aaacttgat tgggagat

18

<210> 168
<211> 15
<212> PRT
<213> Homo sapiens

<400> 168

Asn Asp Asn Arg Glu Arg Gln Glu His Asn Asp Arg Arg Ser Leu
1 5 10 15

<210> 169
<211> 15
<212> PRT
<213> Homo sapiens

<400> 169

Lys Asp Gly Gln Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr Glu
1 5 10 15

<210> 170
<211> 15
<212> PRT
<213> Homo sapiens

<400> 170

Glu Ala Gln Arg Arg Val Ser Lys Asn Ser Lys Tyr Asn Ala Glu
1 5 10 15

<210> 171
<211> 15
<212> PRT
<213> Homo sapiens

<400> 171

Ser His Leu Gly Pro His Arg Ser Thr Pro Glu Ser Arg Ala Ala
1 5 10 15

<210> 172
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 172
cagaggatgg agagaatac

19

<210> 173
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 173
ggctcccaa aactgtcat 19

<210> 174
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 174
gccctagtgt tcatcaagta 20

<210> 175
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 175
aaagcgggag ccaaagtc 18

<210> 176
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 176
tcacagaaga taccgagact 20

<210> 177
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 177
cccaaccata agaagaacag 20

<210> 178
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
 <223> PCR primer

 <400> 178
 tctgtacttt ttaagggttg tg 22

 <210> 179
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <220>
 <221> misc_feature
 <222> (1)..(22)
 <223> where n may be either a or g or c or t/u, unknown or other

 <400> 179
 acttcagagt aattcatcan ca 22

 <210> 180
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <400> 180
 gactccagca ggcatatct 19

 <210> 181
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer

 <220>
 <221> misc_feature
 <222> (1)..(20)
 <223> where n may be either a or g or c or t/u, unknown or other

 <400> 181
 gatgagacaa gtnccntgaa 20

 <210> 182

<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<220>
<221> misc_feature
<222> (1)..(20)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 182
ttagtggtg tttngtgtcc 20

<210> 183
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 183
cacccattta caagtttagc 20

<210> 184
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(241)
<223> where n may be either a or g or c or t/u, unknown or other

<400> 184
cncnnnnnnn nnnnnnnnatt tngtctgtgc cgcntaaata ttaattgtcc ctatacanta 60
ataagantgt gtcagagctc ttaatgtcaa aactttgatt acacagtccc ttttaaggcag 120
ttctgtttta accccaggtg ggttaaatat tccagctatc tgaggagctt ttngataatt 180
ggacctcacc ttagtagttc tctaccctgg ccacacatta gaatcacttg ggagctttta 240
a 241

<210> 185
<211> 241
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(241)

<223> where n may be either a or g or c or t/u, unknown or other

<400> 185

tcnnnnnnnn nccccntaaa tttctccctg ccccgnaaag gttacaaata tcaaaaagnt 60

ggtcactctt nggtatgatt tcacaattca aaactatcac tgccctactc aaccccacaa 120

tgaatgagag aagtcagtaa atgatataca aaattaggct tcagctgtgt ttnccttctt 180

tnggggtttn ctacaatagg agtnccagat tctatgtgac tgactctgga gtcttaactg 240

t 241